

ARMoured VEHICLES

2012



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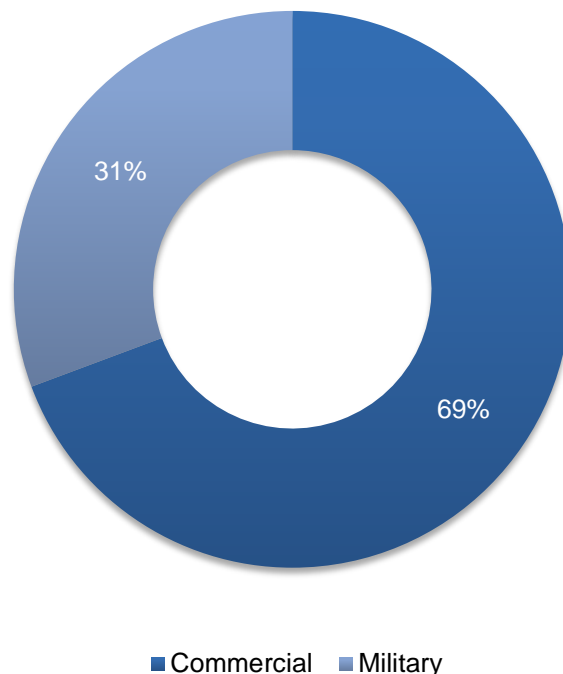
ABOUT

This report will explore how the future of the global armoured vehicle market is likely to evolve over the next decade. The report is based on a survey of 196 senior executives and professionals within the armoured vehicle domain, which includes both commercial and military respondents. The analysis of the survey data has been supplemented with proprietary interviews and desktop research.

Topics examined include; armoured vehicle design requirements, key emerging global markets, the lessons learned from Iraq and Afghanistan, and the impact of the global economic meltdown as defence budgets (at least in the traditionally big-spending defence nations) continue to wane.

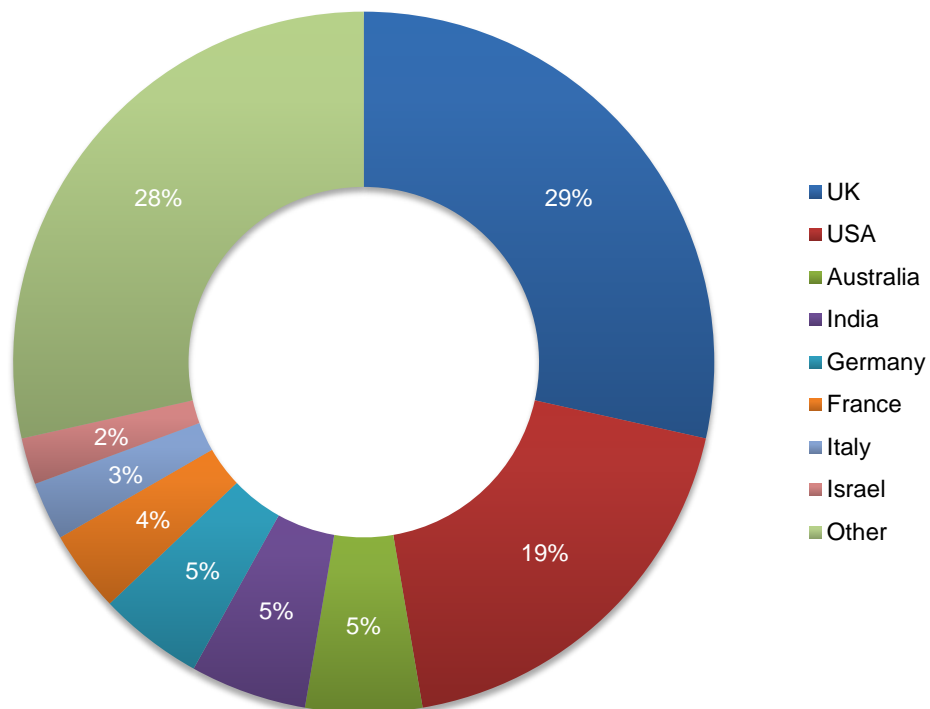
This report is not designed to be a definitive and holistic evaluation of the market; Indeed, no industry study can claim to be a veracious assessment that accounts for every detail and eventuality. It is however intended to be a talking point, to encourage discussion and act as a basis from which the armoured vehicle community can develop forward strategies.

**FIGURE 1:
Type of respondent**



The majority of survey respondents derived from the commercial sector, accounting for 69% of total responses. Military personnel form the remaining 31% (Figure 1), which includes ranking Colonels, Lieutenant Colonels, and Captains. Looking at Figure 2, almost half of survey participants are based in either the UK (28%) or the United States (19%). However, with the armoured vehicle community being so diverse and disparate, answers were sourced from nations all over the globe including Iran, Singapore, Brazil, UAE, Pakistan, Tunisia, South Africa, Brazil, Poland, Bahrain, Saudi Arabia, and so the list goes on; in total, responses were gathered from individuals in 36 distinct countries across every continent.

FIGURE 2:
Overview of survey respondent by nationality



EXECUTIVE SUMMARY

Armoured vehicle requirements over the next decade will centre around being modular, mobile and adaptable. The demand for light armoured vehicles will outstrip all other variants, meaning the supply chain and end-user must traverse the delicate balance between protection and manoeuvrability during this age of economic austerity.

Improvised Explosive Devices (IEDs) were identified by survey respondents as being the most potent and important threat to protect against over the next ten years. In Iraq and Afghanistan IEDs have posed the greatest threat to the lives of serving personnel; their rapid dissemination on the battlefield caught government and industry alike off-guard. Ensuring military forces are equipped with vehicles that are fit for purpose means they must be designed to mitigate the effects of an IED blast and its fallout.

In order to achieve this, and to safeguard continual innovation in the industry, keeping research and development budgets on track will be one of the key challenges as the economic crunch looms. Next generation armoured vehicle programmes are already facing delays and cancellation. Finding new ways to combat threats on a shoestring budget is the military's target, and industry's mission.

However, not every government is faced with the same fiscal constraint. Countries in Asia, South America and the Middle East are all investing in their future capabilities, with India being the most important and hopeful among these. It will be these emerging economies with maturing militaries that will fuel growth for the armoured vehicle market in the future, or at least sustain it at a tolerable level until the global economy recovers.



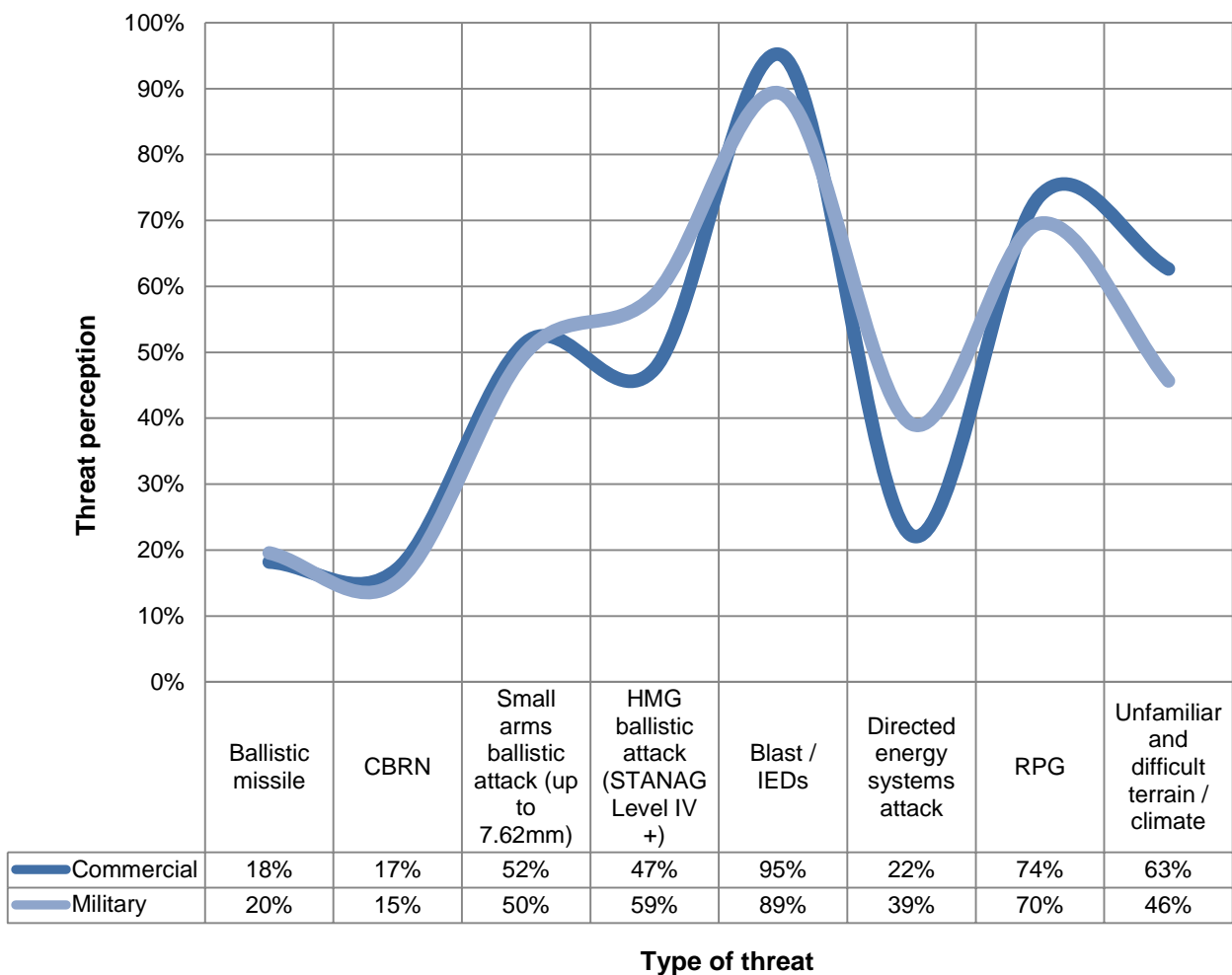
Turning the Page: Threat perception post-Iraq and Afghanistan

IEDs, IEDs, IEDs

What are the critical threats armoured vehicles should be designed to protect against in the future?

In Figure 3, both commercial (95%) and military respondents (89%) identified the roadside bomb as the most critical threat “when considering the future battlespace”.

FIGURE 3:
Analysis of key threats to protect against in the future



Question: Post-Afghanistan, which threats should armoured vehicles seek to protect against most when considering the future battlespace? (Select all that apply)

“IEDs, IEDs, IEDs”. Improvised Explosive Devices (IEDs) are plainly the key threat vehicles should look to protect against over the next decade, that is apparent from Figure 3, but the number of responses citing the exact same answer – “IEDs, IEDs, IEDs” – is unequivocal and revealing. Firstly, this illustrates that there is a patent unanimity among vehicle experts that IEDs are the number one most significant threat facing road-transported military personnel. But it also highlights rather well that, such is their prevalence and devastating impact, they present the number two and three most potent danger to armoured vehicles as well: “IEDs, IEDs, IEDs.” All other threats, though clear and present, must be considered ancillary to the biggest killer on the frontlines and backstreets: IEDs.

The impact of IEDs underpins one of the key lessons learned from Iraq and Afghanistan: Armoured vehicles should be fit for purpose and procured based on requirements, not price. The use of the Snatch Land Rover in the early days of the conflict is reported to have cost the lives of numerous UK service personnel, leading to it being infamously known as a “death trap.” The Snatch is a sound, reliable vehicle for the arena it was originally designed for – in Iraq and Afghanistan it was not fit for purpose. Understanding the threat environment and providing adequate equipment to combat it is fundamental; because of Iraq and Afghanistan the public, let alone the military, will not settle for anything less.

“In today's uncertain and complex operating environment, the US Army's equipping strategy must accomplish several things; it must set and enforce priorities, re-validate and adjust requirements to maintain pace with technology improvements and the threat, eliminate redundancies, leverage efficiencies, and be affordable within the context of our constrained fiscal environment. Our modernisation strategy is focused on investing wisely in the capabilities that will enable our Army to succeed in any operation, against any adversary, anywhere, today and in the future.”

**Lieutenant General Robert Lennox,
Deputy Chief of Staff, Army G-8**

THREAT PERCEPTIONS

Based on the findings of the survey, a general consensus of opinion is seen between those in the military and those in the business of designing and manufacturing vehicles. But there are disparities. Most significant of these (at least in terms of the percentage offset) is the issue of unfamiliar and difficult terrains and climates. Languishing in mid-table, just 46% of military respondents perceived this to be a critical threat to armoured vehicles in-theatre, whereas for commercial respondents this figure jumps to 63%, making it the third most significant threat behind IEDs and RPG attack.

Why the chasm of opinion? Experience informs decisions and perceptions; consequently, there will undoubtedly be some areas in which the people with their 'feet on the ground' will come at an issue from an entirely different viewpoint from someone in the office. In this case we should infer that, while the ability to operate on difficult terrain in extreme climates should be one of the factors taken into account when designing and procuring armoured vehicles, it should not be prioritised. Commanders in the field have other options to consider, literally 'other avenues to explore', when it comes to terrain because routes and strategies can be altered to accommodate the easiest, safest and most effective path. They cannot mitigate the effect of an IED blast. They cannot prevent an RPG thundering against the vehicle wall or a .50 cal Browning rasping through a turret.

“Protection can be offset by mobility. It is the mobility with which we can overcome the protection requirements ... we need to have light armoured vehicles with high power-to-weight ratios and high mobility, which is the only way I think we can achieve better protection.”

**Brigadier General C.P. Mohanty,
North Kivu Brigade Commander,
MONUSCO Mission to the DRC, United Nations**



A similar theme continues with the proposition of directed energy attacks. Only 22% of commercial respondents see this as a threat while 39% in the military do. The need for armoured vehicles to protect against directed energy attacks in the short-term here is perhaps overstated. However, it would be imprudent to dismiss the threat entirely, after all few imagined the IED would be such a rampant and destructive weapon at the turn of the millennium. So, ask this same question about directed energy weapons in five or ten years time and one would expect a heightened response rate as technology continues to move at breakneck speed. For example, in November Rheinmetall shot down a low-altitude unmanned UAV with a 10kW laser, marking the first time the company had done so with its directed energy weapon integrated with a full air defence system. Piquing the curiosity of armoured vehicle integrators in particular, and relevant to the IED conundrum, Rheinmetall also demonstrated the use of a 1-kW laser weapon that "proved highly effective in destroying IEDs as well as neutralizing unexploded ordnance from a safe distance," according to a company press release.

The term "when considering the future battlespace" is worth exploring here too. IEDs are currently the number one killer of forces abroad, primarily locked in counterinsurgency operations facing an enemy almost unseen, often indiscriminate, and always dangerous. The overwhelming sentiment here suggests that this type of warfare will linger for at least the next ten years – nodding towards continued operations in the Middle East and potential conflict in North Africa. President Obama and Defense Secretary Leon Panetta recently unveiled the U.S.'s revised global defence strategy, which marks a step-change in focus moving from Europe towards Asia. While eyes may be turning east, it seems the grunt work will continue to take place in the MEA region as any potential conflict in the Far East would not be one of counterinsurgency where IEDs were utilised as the principal form of attack.

SETTING THE SIGHTS ON THE BALLISTIC THREAT

The ballistic threat is another point of contention between the military and industry. Both sets of respondents anticipate ballistic protection to be an important component of vehicle design until at least 2020. It always has been, and for the foreseeable future it will continue to be so. However, the discrepancy comes in the type of ballistic threats the armed forces will come up against. Roughly half of all respondents (commercial and military) perceive vulnerabilities to the small arms and heavy machine gun (HMG) threat to be of critical importance, but they cannot agree on which of the two is more significant. 59% of military personnel believe HMG threats, such as .50 BMG and 14.5mm B32, present the most meaningful danger to soldiers while only 47% of commercial respondents agree. For small arms threats – in this instance those classified as STANAG Level III and below – the trend is reversed.

Again this comes down to experience and perception. Military personnel who have walked the streets of Baghdad and have been stationed in forward operating bases in the wilds of Helmand Province may have seen a real and increased threat from HMG attack on their outfits. However, more than likely what this is really stressing is the military's desire for more, bigger and better equipment. They know if their tanks are protected against STANAG Level IV (an armour piercing 14.5mm B32 round), they get STANAG Levels I, II and III (which covers all sorts including the omnipresent AK-47 and all its bigger brothers in the 7.62mm family as well as its 5.56mm cousin) as a result. Industry is more reserved – more realistic? – because cost and weight significantly increase once HMG threats are written into the tender. Considering light armoured vehicles are set to be in the highest demand over the next decade (Figures 4 and 5), weight and cost are unquestionably critical concerns.

“The vehicle is not a do-all and end-all tool and cannot be designed to meet all eventualities.”

**Cobus van der Merwe, Executive
Manager for Business Development,
Saab**

Survivability and the trade-off between protection and mobility is a theme that will be explored in the next section of this report.

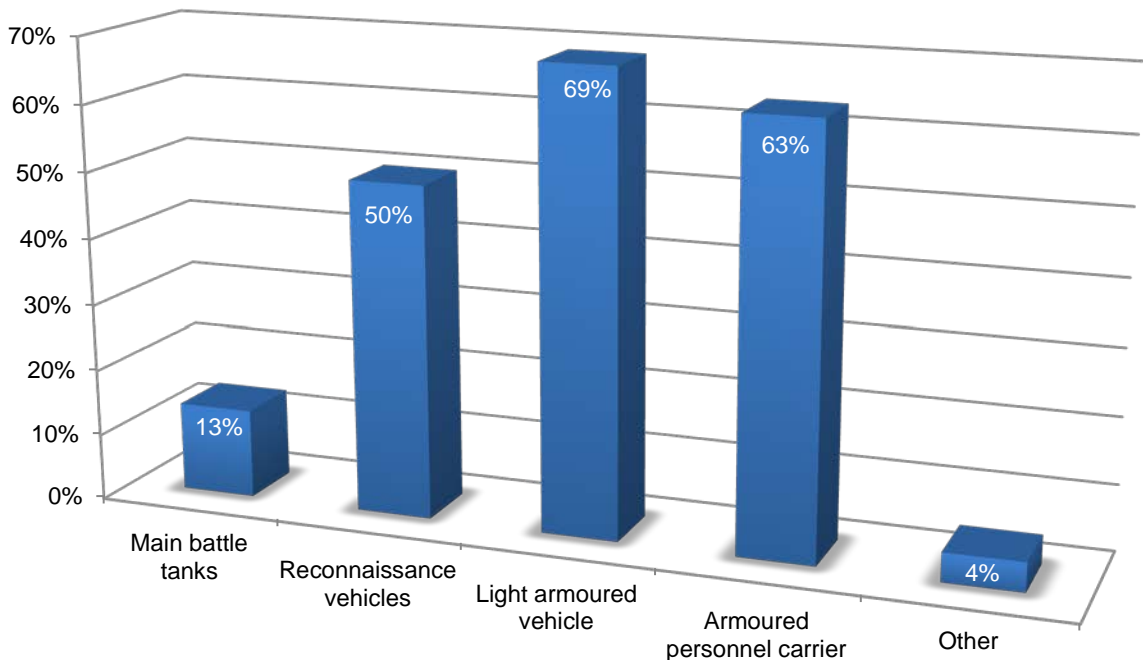
Survivability: Balancing the capability gap

MODULAR, MOBILE, ADAPTABLE

In the future, armoured vehicles “will need to be able to re-role quickly between offensive, COIN (counterinsurgency) and peacekeeping roles,” says Mike Payne, ex-British Army turned defence engineering consultant and programme manager.

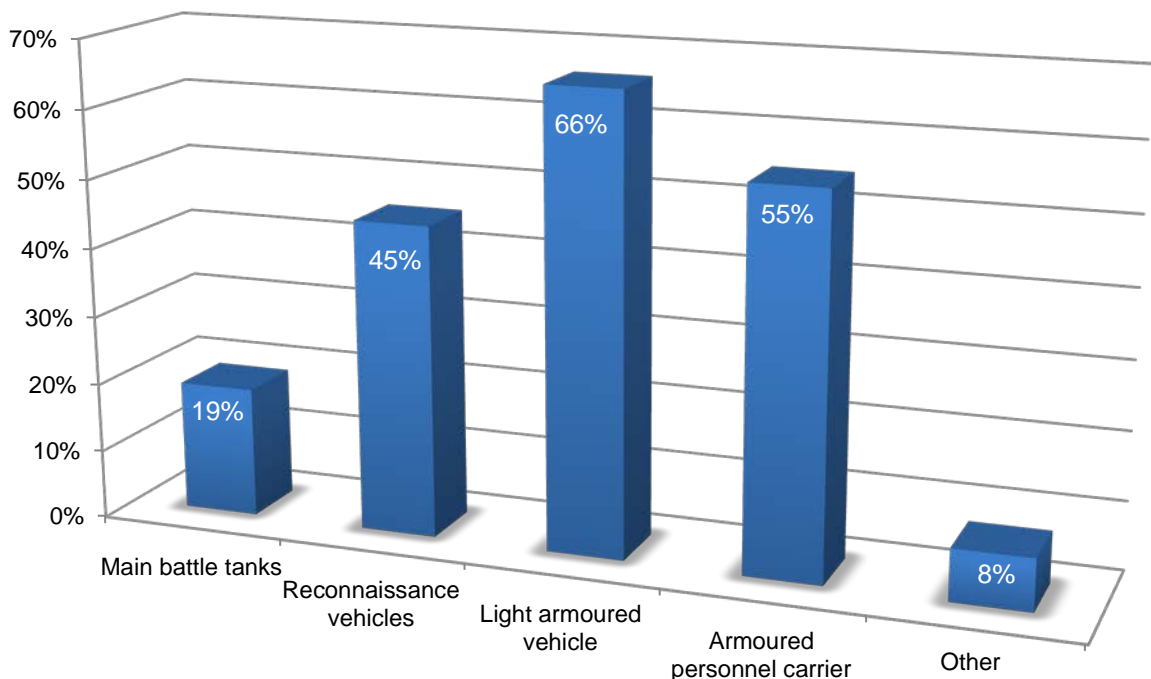
That’s because support and reconnaissance vehicles are no longer just support and reconnaissance vehicles – they are the mainstay of the Army abroad and will need to be up-armoured as a result of their increased multi-role capacity. Figures 4 and 5 demonstrate the demand for light armoured vehicles in the future: Modular, mobile and adaptable.

FIGURE 4:
Summary of demand for armour vehicles by variant (commercial)



Question: Which type of armoured vehicles are likely to be in the highest demand globally over the next ten years? (Select all that apply)

FIGURE 5:
Summary of demand for armoured vehicles by variant (military)



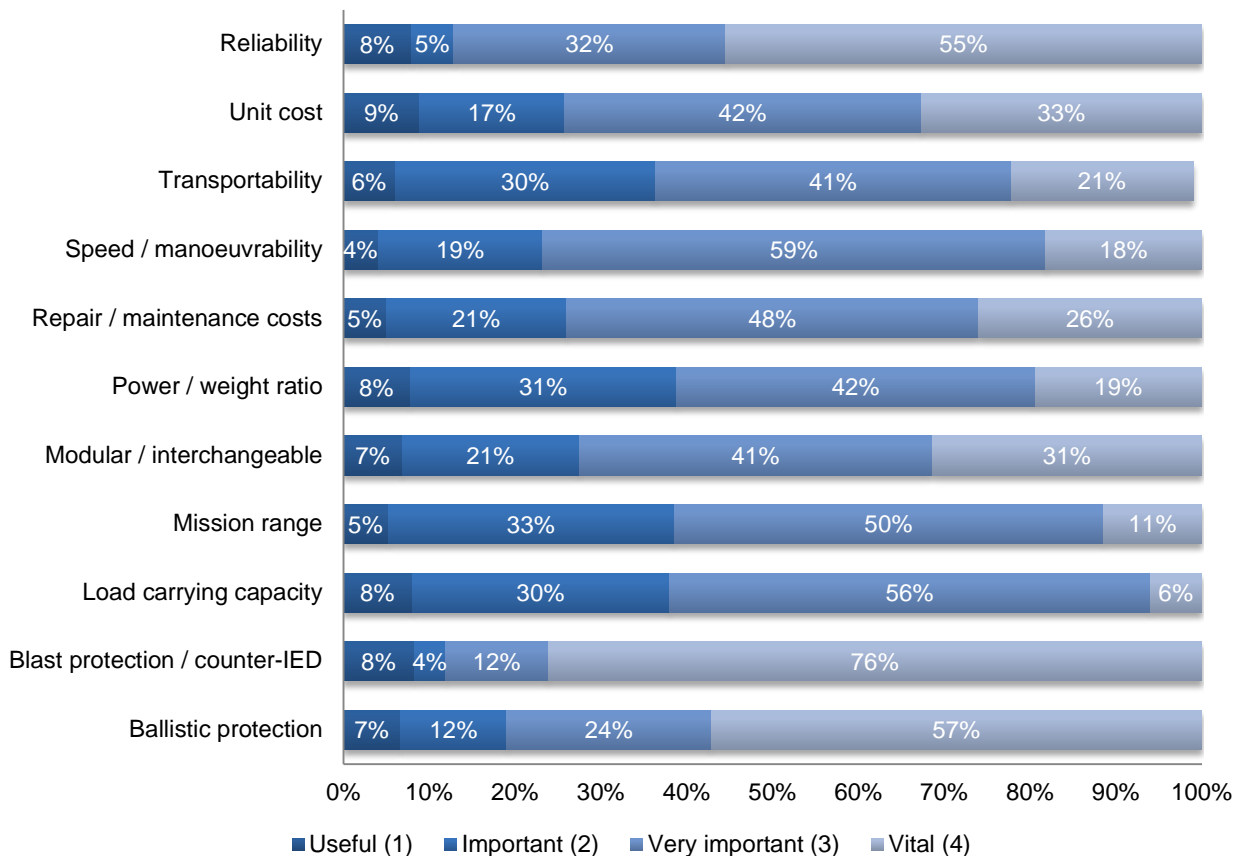
Question: Which type of armoured vehicles are likely to be in the highest demand globally over the next ten years? (Select all that apply)

Although not quite fitting into the 'light' description here, the recently announced £1 billion upgrade to the UK's Warrior IFV is a good example of how governments are seeking out modular armour systems in order to boast a fleet of adaptable vehicles that are potentially fit for *any* purpose. Figures 6 and 7 show that 31% of both commercial and military respondents expect modular, interchangeable roles to be a vital AV attribute over the next decade. Indeed, the Warrior has come under increasing criticism over the last decade after a number of deaths from IEDs in the Middle East. Caught out by rapidly evolving threats and differing warfare landscapes in the past, the UK MoD is keen to future-proof the next generation of Warrior fighting vehicle. That is what this contract is really about: Beyond being a standard upgrade it is intended to give the MoD options when the Warrior finds itself in another as-yet-unknown battlefield, facing another as-yet-undefined threat. Implementing a new mounting system will allow the armour 'modules' to be easily removed and replaced to match the specific in-theatre threat required at any given time. Not only will this new approach increase the vehicle's survivability in the short- and medium-term, it will also facilitate its deployment in a number of combat environments and make the next phase of upgrades a far smoother and simpler one.

In theory this approach plays out well, but Cobus van der Merwe, Executive Manager for Business Development at Saab and former Colonel in the South African Defence Force, reminds us that “the vehicle is not a do-all and end-all tool and cannot be designed to meet all eventualities.” While a move towards multi-role vehicles is desirable, the limitations of this approach should not be overlooked or underestimated.

Lieutenant General Antonio Gucciardino, formerly General Manager of Procurement Agency for Land Systems, Italian Army, underscored this point further, saying: “Commanders must be aware that it is not possible to fulfil all their requirements in a ‘one size fits all’ solution.”

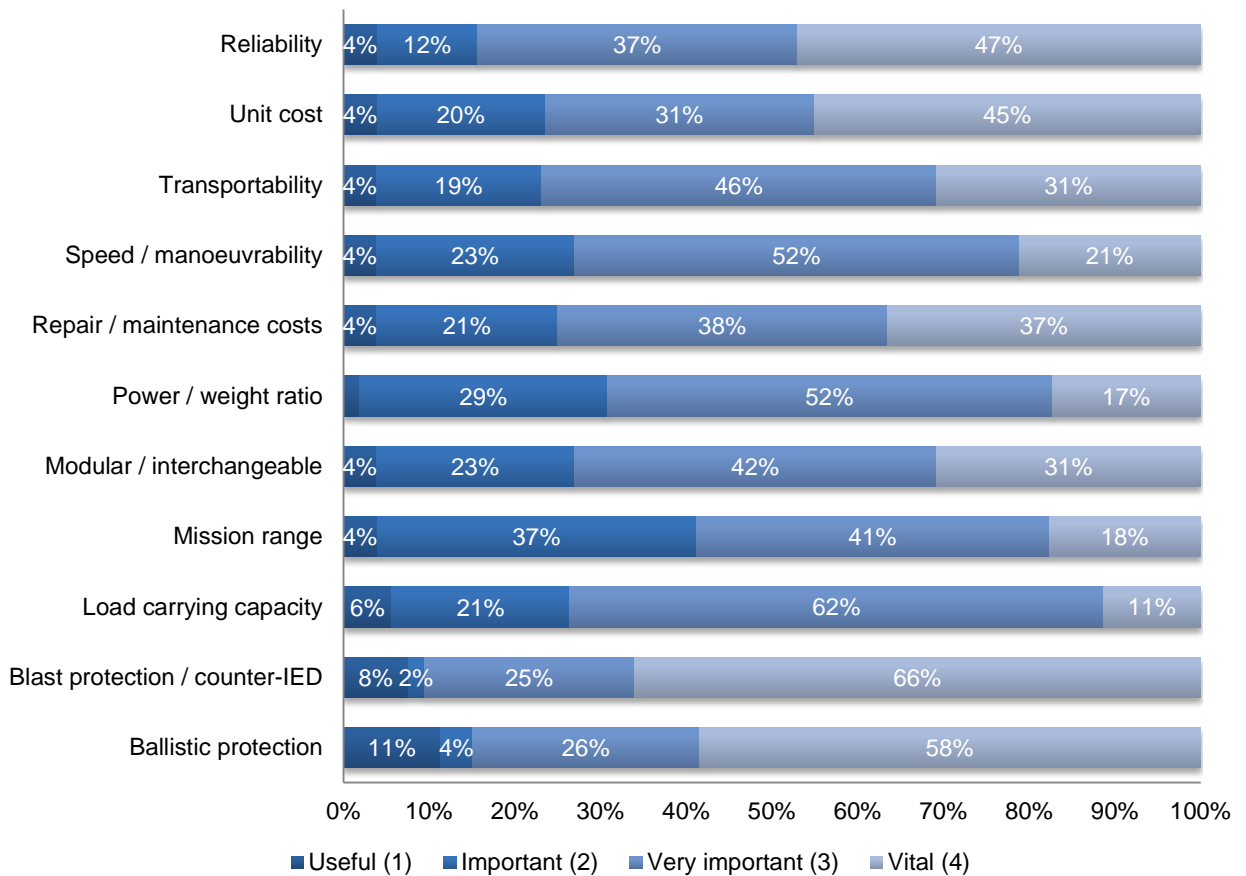
FIGURE 6:
Commercial analysis of the most critical armoured vehicle design attributes



Question: In terms of key armoured vehicle requirements for the next 10 years, please rate the following attributes on a scale from 1 – 4 (1 = unimportant, 4 = critical). (Select all that apply)



**FIGURE 7:
Military analysis of the most critical
armoured vehicle design attributes**



Question: In terms of key armoured vehicle requirements for the next 10 years, please rate the following attributes on a scale from 1 – 4 (1 = unimportant, 4 = critical). (Select all that apply)

THE PERFORMANCE TRIANGLE

When designing an armoured vehicle, which attributes should be afforded the most significance? What are the key criteria around which everything else should revolve?

The Project Triangle is the engineer's best friend, he knows it intimately and it's always on hand to reinforce and remind him of his objectives. For this reason it also happens to be his biggest nightmare. Balancing cost, weight and performance is an age-old question – how do you design, but more importantly manufacture, something that does exactly what it needs to do without costing the earth or compromising on performance?

For armoured vehicle designers there is always a play-off between cost, protection and weight. "If only I knew which was more important," they say. "Which do I prioritise – cost, weight, or protection?"

The answer is protection.

Whether respondents are in the military or industry, the consensus leads to protection being the dominant design requirement for armoured vehicles over the next ten years. In Figures 6 and 7 respectively, 76% of commercial respondents and 66% of military respondents identified IED and blast as the key requirement, closely followed by ballistic protection (with 57% and 58% respectively).

Cost misses the podium altogether, managing to just about scrape it's way into fourth place for both sets of respondents. Even with the bleak economic climate as a backdrop, cost is not perceived to be a primary concern. Reliability is a more prominent issue according to survey respondents. Indeed, taking the two highest scores on the scale together (i.e. marking number 3 or number 4 in the survey question) puts reliability ahead of ballistic protection for commercial respondents (88% identified IEDs, 87% reliability, 81% ballistic protection).

Perhaps one of the stand-out statistics to take from Figures 6 and 7 is the low response rate for "power/weight ratio." While it's apparent that protection is the chief concern, this always works in harmony with the 'weight' aspect; taking these two together, we arrive at what is actually the fundamental issue: performance.

Performance infers survivability, survivability is an upshot of performance. As a result, weight and protection are directly proportional.

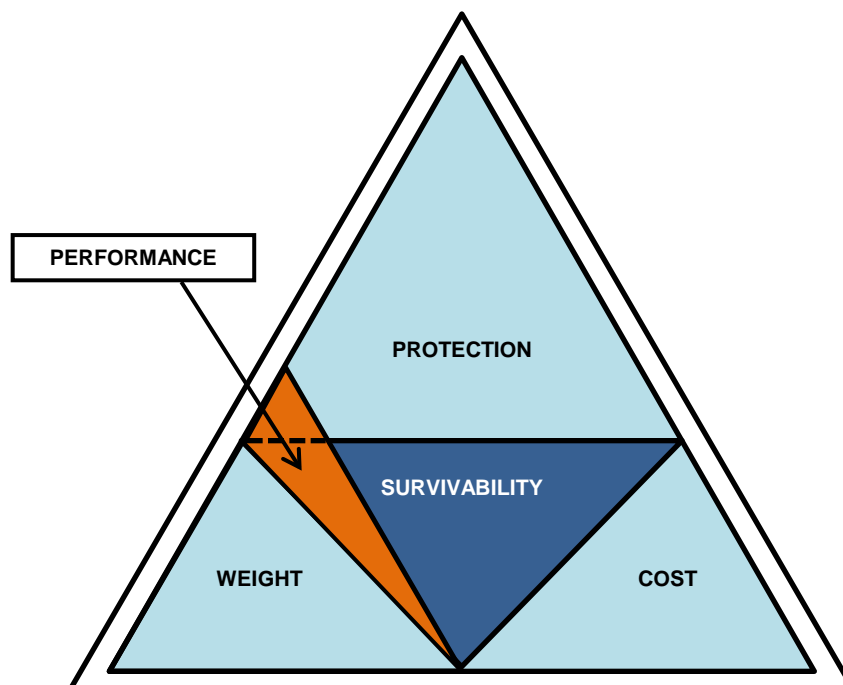
“We will not neglect mobility ... in fact survivability is in a way a balance between protection, fire power and mobility,” said Brigadier General Chris Gildenhuys, Chief of the South African Armour Foundation, South African Army, at International Armoured Vehicles South Africa last year.

Mobility, which is predominantly regulated by the power-to-weight ratio, is particularly relevant to the light armoured vehicle variant.

“Protection can be offset by mobility,” said Brigadier General C.P. Mohanty, North Kivu Brigade Commander, MONUSCO Mission to the DRC, United Nations. “It is the mobility with which we can overcome the protection requirements ... we need to have light armoured vehicles with high power-to-weight ratios and high mobility, which is the only way I think we can achieve better protection.”

Lieutenant General Gucciardino agrees. “I would like to emphasise that the increased protection of armoured vehicles is not only determined by ballistic resistance, but even more, it depends on the capability to have high mobility.”

In summary, the Armoured Vehicle Performance Triangle might look a little like this:



That’s the theory anyway. But how will this play out in reality as budgets are squeezed and requirements blur?

Economic downturn sparks strategic shift

The sluggish economy is an overriding concern for industry and the military alike as the impact of budget cuts begins to put pressure on all links in the supply chain.

When asked what the most significant factor affecting armoured vehicle procurement will be over the next decade (Figure 8), “economic instability” came away with a resounding 79% of the vote. The next closest issue, “required technology not being commercially available,” was 53% adrift, with just 26% identifying it as an important factor. Economic instability is not just an inconvenient issue presenting short-term discomfort, it’s a cancer.

With the U.S. Department of Defence (DoD) required to make cuts in the order of \$450 billion over the next ten years, we can see why. In the recent briefing at the Pentagon where Obama and Panetta delivered their new defence strategy, the rhetoric was upbeat. It was focused on positive transition and investment – the U.S defence budget will still be larger than the next ten biggest spending military nations combined, Obama

reminded us. To put it in context, the DoD budget alone would classify as the world’s 19th largest economy.

“Over the past ten years, since 9/11, our defence budget grew at an extraordinary pace. Over the next 10 years, growth will slow, but the fact of the matter is it will still grow.”

Barack Obama,
President of the United States of America

“Over the past ten years, since 9/11, our defence budget grew at an extraordinary pace,” the President said. “Over the next 10 years, growth will slow, but the fact of the matter is it will still grow.”

Unmanned aerial vehicles, cyber security, counter-terrorism, special operations and C4ISR (Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance) will all see increased investment. But what about the armoured vehicle market? How will it respond?



Regardless of fiscal constraints, both Obama and Panetta were quick to stress that America's war-fighting strategy had to change anyway. The threats of the 21st Century require it. "The size of our defence budgets has to be driven by a strategy, not the other way around," said Obama. Panetta went on to state: "The savings we've been mandated to achieve must be driven by strategy ... not by numbers alone."

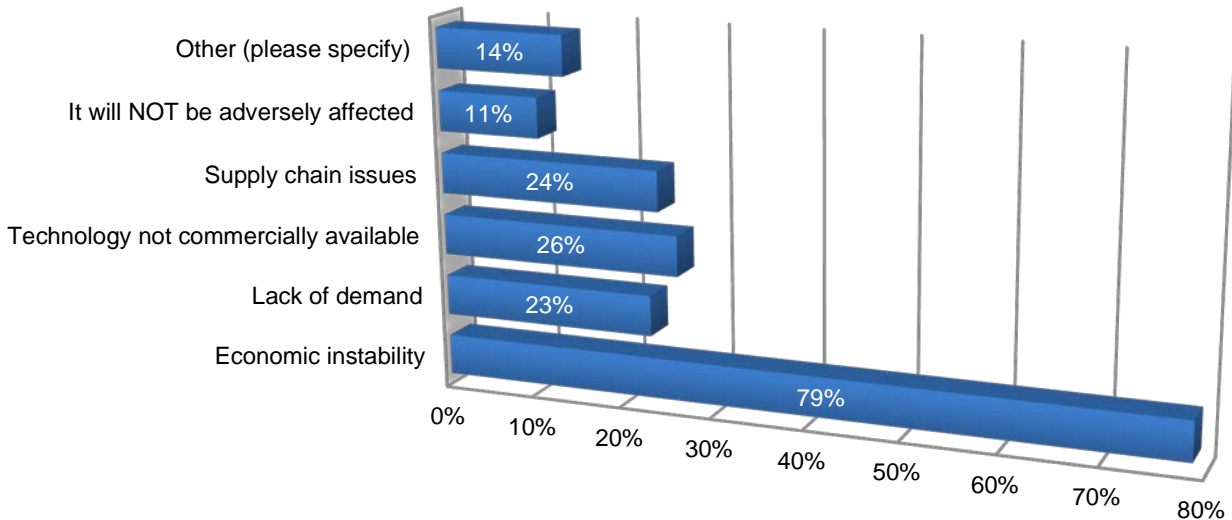
David Thomas, Director at Pgam Advanced Technologies Ltd., confirms the government's stance on this issue, and adds a caveat explaining that educating acquisition teams will help the armoured vehicle industry surmount the many challenges it faces in the short and medium-term. "The education of buyers is paramount to ensure they specify a product that meets mission requirements, not a budget," says Thomas.

Cost aside then, war-fighting and business strategies must adapt to the changing political environment. Obama said that the U.S. government is now "turning the page" on the post-9/11 world and moving onto a new chapter. If this is the case, let's hope the contents of the next one read more like an instruction manual. That's because this is a fundamental challenge that has previously dogged the armoured vehicle industry: Miscommunication between the public and private sector.

Top-down communication breakdown is one the central woes identified by a recent Public Accounts Committee (PAC) report on the UK's armoured vehicle procurement process, entitled 'The cost-effective delivery of an armoured vehicle capability.' "Over the past six years the Department has removed £47.4 billion from its equipment programme up to 2020-21," the report states. But here's the key statistic; of that £47.4 billion funding gap, £10.8 billion (23%) has been removed from armour vehicle projects alone.

Armoured vehicle programmes, it seems, have been easy prey. That must change. While the government is not cutting current capacity, it is constricting future capability. Armoured vehicles will be procured over the next decade, but they will not be the bespoke, next-generation variant once envisioned. R&D is the real loser in this economic climate; it's not just the drawbacks and downgrades being felt today, but the stifling of innovation for tomorrow.

FIGURE 8:
Summary of the factors impacting armoured vehicle procurement to 2022



Question: Which of the following factors do you think will have the most significant impact on armoured vehicle procurement over the next 10 years? (Select all that apply)

And there are alternatives; the procurement of commercial off-the-shelf (COTS) equipment could be one way in which armoured vehicle acquisition is changed for the better. The problem with large contracts, such as the Future Rapid Effects Systems (FRES), is that once they have been authorised, it's very difficult for a minister to cancel them. Even if requirements change, or the money dries up. So they are delayed, often for years at a time. At the other extreme, Urgent Operational Requirement (UOR) orders can be in the battlefield within weeks or months of the contract being signed. Yet they are expensive and short-sighted, often not presenting value for money in the long-term. Buying COTS equipment could be a suitable compromise.

The consequences of this approach should not be overlooked however, as a recent Royal United Services Institute (RUSI) report, 'The Destinations of the Defence Pound' by Trevor Taylor and John Louth, explains the financial impact buying COTS would have. "If the UK moves to spending even a third of its capital spending on off-the-shelf foreign systems, that would represent about £1 billion less revenue for the Treasury than might have been the case," the report says.

COTS or not, the MoD must improve the process it has in place to acquire armoured vehicles in order to keep up with operational changes as and when they occur.

The economic climate is oppressive, and it's dour. The industry will have to adapt to survive. Companies that diversify may find they not only keep their heads above water, but indeed prosper. And the maintenance, repair and overhaul (MRO) option must surely be high on the list of priorities. That is certainly the opinion of the majority of military respondents who see MRO as a viable alternative to buying new as a consequence of budget cuts.

Taking this one step further, respondents also implored that industry begin to work towards a more interoperable architecture to make the upgrade of armour vehicles quicker, more affordable and, most importantly, more operationally effective. Technologies are advancing at such a pace now that it is becoming troublesome to upgrade electronic components because they soon become obsolete; Obsolete is not a word that should be banded around multi-million pound machines.

Military respondents were asked the following question: To what extent will budget cuts impact armoured vehicle procurement over the next 10 years? Istvan Taliàn, of the Hungarian Embassy's Defence Section, rather succinctly replied as follows:

"In Europe critically, in the US heavily, in Asia insignificantly."



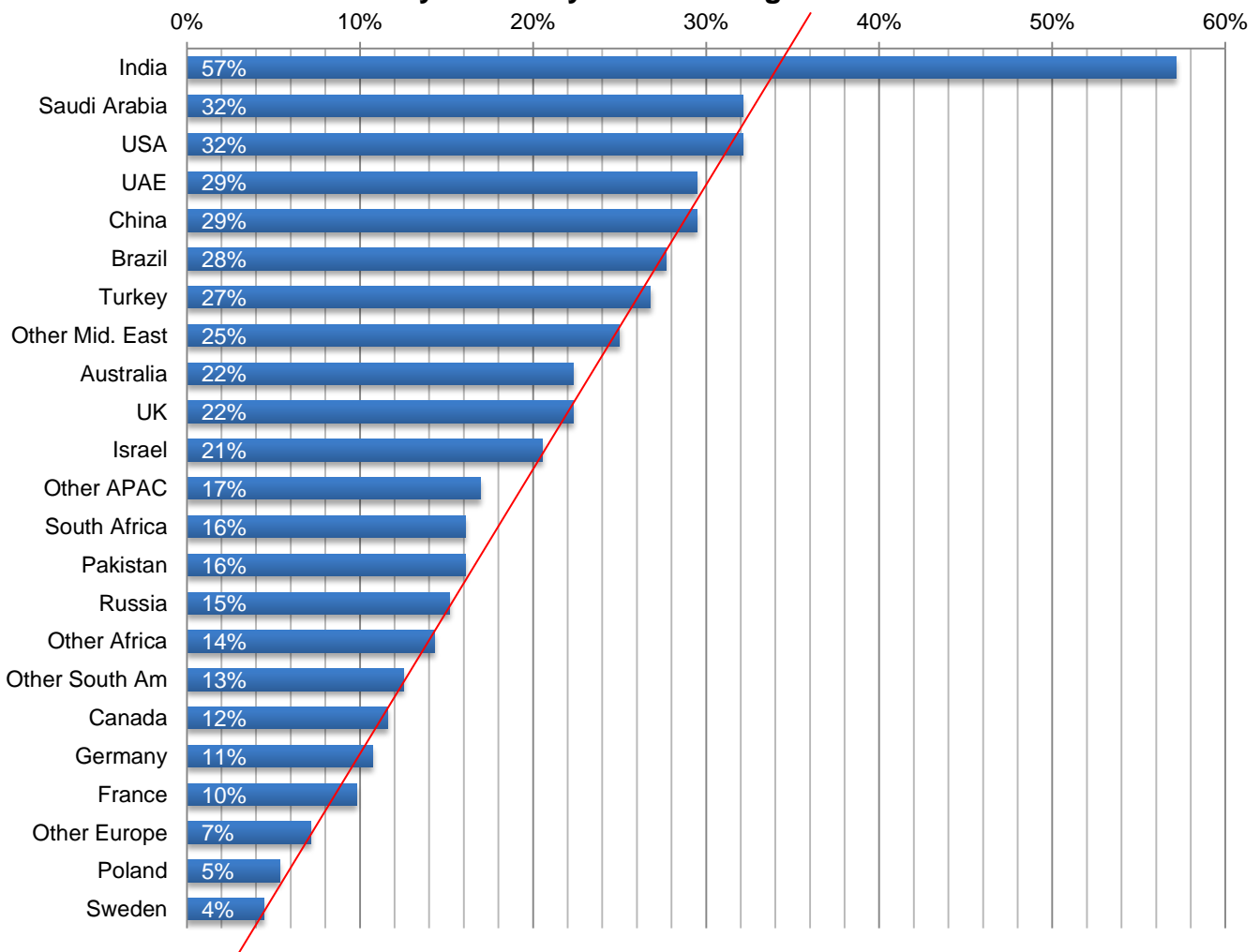
Land of hope and glory

THE SUN RISES...

Identifying and exploiting new and emerging markets is the critical next step for global armoured vehicle designers, manufacturers and integrators.

With India highlighted by 57% of all respondents as the country with the greatest potential for growth, there's little confusion about where priorities lie. Looking at Figure 9, there is a marked, steady trend from low to high. That is until you get to the very top, until you get to India.

FIGURE 9:
Summary of the key markets for growth to 2022



Question: Which countries present the greatest potential for growth and will be targeted as a priority over the next 10 years? (Select all that apply)



In his recent New Year message, Indian Prime Minister Dr. Manmohan Singh, asserted: “Our Army, our Navy and our Air Force require modernisation and upgradation of personnel and systems. Ensuring this will remain my most important task as Prime Minister.”

It's no secret India will spend a great deal on defence and security over the next decade as it seeks to establish a world class and robust national security infrastructure, but it's unclear how much of this business will go to international tender. India has designs on a policy of self-sufficiency whenever possible; the armoured vehicle industry would be unwise to pin all its hopes on one country.

“Against the complex nature of future threats and challenges, in the elongated spectrum of conflict, the Indian Armed Forces are committed to delivering security. Strategic transformation based on a judicious mix of a capability and threat-based approach against the backdrop of anticipated technology and fiscal development is exciting. The moment has arrived when India is on the threshold of economic and technological surge.”

**Lieutenant General J.P. Singh (Rtd.),
Former Deputy Chief of Staff, Indian Army**

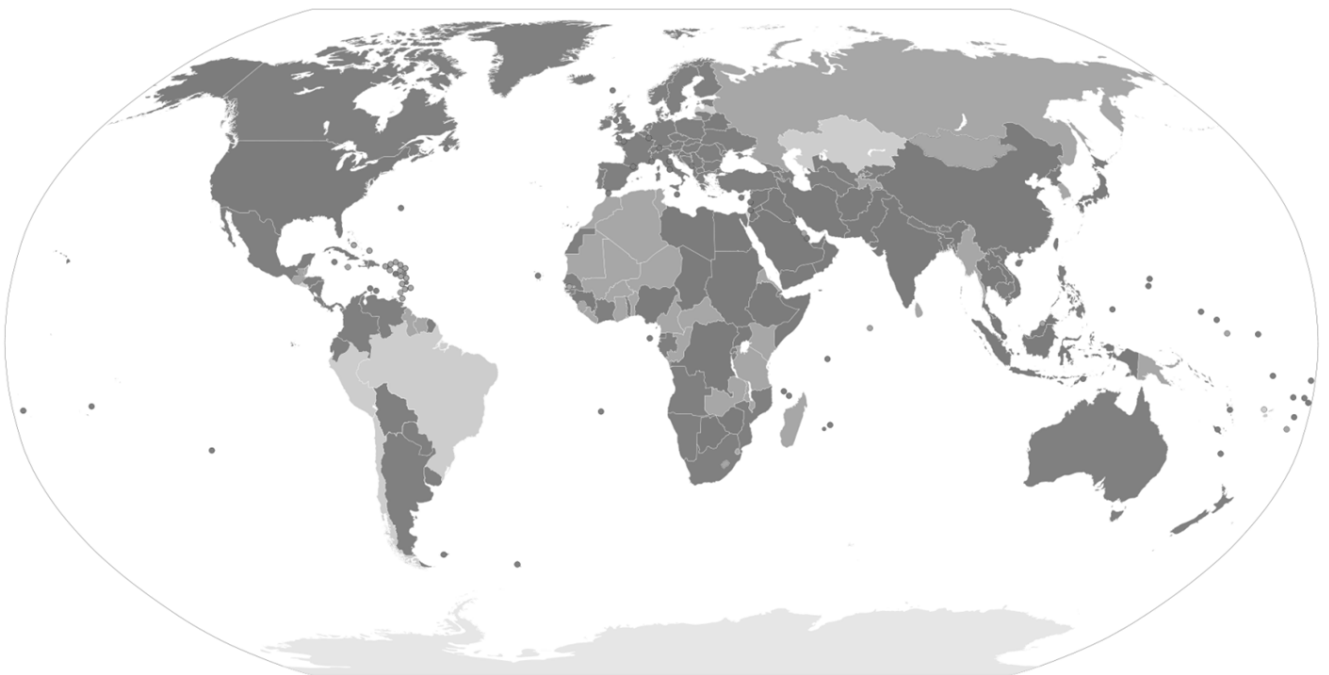
Underpinning the sentiment expressed by Taliàn that the state of the European market is critical, the bottom five countries surveyed are all European: Germany (11%), France (10%), Other Europe (7%), Poland (5%) and Sweden (4%).

With the U.S. set to remove its troops from European shores and station them in the Asia-Pacific region, it certainly looks like the European defence market is in peril. Add the EU crisis into the balance and you could argue it's toxic.

But is it? Would the break-up of the EU, or at least the Eurozone, have an adverse effect on an already ailing patient? Or would it breathe new life into it? Steve Holland, a TERRIER Systems Engineer at BAE Systems, is clear in his mind, saying that "the breakup of the EU could lead to a boom in orders as countries look to bolster their neglected sovereign capabilities."

Certainly it might lead to the (quicker) formation of the much discussed Weimar Triangle, a defence cooperation group consisting of Germany, France and Poland. These central European powers are already attempting to make trilateral co-investment in defence programmes a reality; should they succeed the Weimar Triangle could yet be a powerful, coveted European defence market.

The UK was the only European nation to make it into the top ten target countries. As discussed above, David Cameron's government has set aside £5.5 billion for armoured vehicles, which would have been a major factor informing opinion here.



Geopolitically, the two most interesting countries in the top ten here are Australia and Turkey. Australia will be of vital strategic importance to the U.S. as China continues to impress its dominance not just in the East, but as it begins its own Manifest Destiny and encroaches on the West too. Tensions between Australia and China are already strained because of America's heightened regional influence; it remains to be seen how this dynamic will play out and what the consequences could be for the armoured vehicle industry. In December the Australian government took what it described as "the next step" in its \$7.5 billion Project Overlander programme that will provide the Australian Defence Force with around 7,500 new vehicles over the next decade. Rheinmetall MAN Military Vehicles Australia and Thales Australia were down-selected to supply the variants. Turkey is also a geopolitical cornerstone, being quite literally the gateway between East and West, and central to any Middle East strategies in the future. This aside, it also has the world's fourth largest army and a defence manufacturing base which is on the uptick.

29% of respondents indicated that China will be an important growth market over the next decade. While its ambitions and wealth are undoubtedly accelerating, the question remains how to penetrate this market and take advantage of the country's growing economy and military might.

On a par with China, the UAE also took 29% of the vote. Recently The Strait Group announced it would establish the world's largest armoured vehicle manufacturing site in Ras Al Khaimah.

Other noteworthy regions include Saudi Arabia, with 32% of respondents highlighting this small but wealthy state as a target for expansion in the future. Saudi Arabia is by some distance the highest defence spending nation in the world with 10.4% of Gross Domestic Product (GDP) apportioned to the defence budget. In contrast America comes in at under 5% and the UK and India closer to 2%.

The conclusion that it's 'all eyes to the East' may not be a surprising one. The absolute conviction and commitment to India as the Promised Land perhaps should be.



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This year, the event has already confirmed 300+ (and counting) senior military participants from 29 countries, 13 of the world's biggest OEMs, 100 defence companies from across the world, and expects thousands of visitors from 37+ countries. [See who else is attending.](#)

The prestigious speaker faculty features 50+ senior military and government officials on the speaker faculty, with Minister Peter Luff, MP of the UK Ministry of Defence and General Sir Peter Wall from the British Army providing the opening and closing addresses. [View the full speaker list.](#)

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July 2012
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October 2012
Singapore



November 2012
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About the author



Andrew Elwell is the editor of Defence IQ. He has previously worked as a survivability specialist for a provider of ballistic and blast armour systems. Andrew holds a BA in History and American Studies from the University of Nottingham. He can be reached on andrew.elwell@iqpc.co.uk.