



## TAM Research (Defense)

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# Introduction

Allocc aims to **reduce execution times of megaprojects by 30–50%**. This analysis assesses the **Total Addressable Market (TAM)** for Allocc in the Western defense sector, focusing on projects exceeding \$100 million in value. The scope includes **defense, aerospace, homeland security**, and major defense contractor programs (e.g. shipbuilding and missile systems) across the **United States, European Union, and United Kingdom**. Both public (government-funded) and private-sector megaprojects are considered. By accelerating project delivery, Allocc can unlock significant value in these large programs. We estimate the annual spending on relevant megaprojects in each region, the potential time and cost savings from a 30–50% schedule reduction, the additional revenue or value that faster execution makes available, and Allocc's TAM using a value-based pricing model (capturing 30% of the unlocked value).

# Megaproject Execution Challenges in Defense

Megaprojects in defense and aerospace are notorious for **budget and schedule overruns**. A recent survey by McKinsey found that *“on average, projects overrun their budgets and schedules by 30 to 45 percent”*. In fact, **98% of megaprojects suffer cost overruns of over 30%, and 77% are at least 40% late**. These delays and overruns translate into substantial financial losses. According to an analysis by Ingeniva, *“for major capital projects, every day late equates to thousands of dollars lost”*; even a **10% schedule overrun can erode project profitability by about \$5 million**, and the **average ~30% delay on a \$50 million project can add ~\$15 million in cost**. This illustrates how **schedule inefficiency directly drives up costs**. Moreover, in defense acquisitions, delays have strategic costs: *“lengthy or delayed acquisitions may translate into a critical delay of necessary capabilities to the warfighter and additional costs to the government”*. Given that **overruns of 30–50% are common**, Alloc's promise to cut execution time by up to 50% directly addresses a widespread pain point. By avoiding typical delays, projects can be completed faster **without the usual cost inflation**, yielding substantial savings and earlier realization of benefits. These avoided costs and accelerated benefits form the basis of “unlocked unrealized revenue” – the additional value that would otherwise be lost to inefficiency.

# Methodology

Our TAM analysis follows a structured approach aligned with the provided methodology:

1. **Annual Megaproject Spending by Region:** We identified annual spending on **\$100M+ defense-related projects** in each target region (US, EU, UK). This primarily includes defense procurement and R&D budgets (for new weapons systems, vehicles, ships, aircraft, etc.), major aerospace projects, and large-scale homeland security programs. For the **United States**, roughly **37% of the FY2024 defense budget** (about \$842 billion) is devoted to procurement and R&D . This equates to **approximately \$310 billion per year** in major defense acquisitions. In the **European Union**, collective defense spending reached an estimated **€326 billion in 2024**, with about **€102 billion (over 30%) dedicated to investment in equipment procurement and R&D** . This is roughly \$110 billion annually on mega-projects across EU member states. The **United Kingdom's** defense budget for 2024/25 is about **£56.9 billion** . The UK's 10-year Equipment Plan allocates **£288.6 billion to equipment procurement and support (49% of the defense budget)** , averaging to **~£28.9 billion per year** (~\$36 billion) on major programs. These figures represent the pool of annual spending on megaprojects that could benefit from faster execution. (Notable examples include U.S. programs like the F-35 fighter, new Columbia-class submarines, and NASA's Artemis rocket; Europe's joint fighter and frigate projects; and the UK's Dreadnought-class submarines and Tempest combat air program. Many such programs individually cost billions, with **DoD's 76 largest acquisition projects alone totaling over \$2.1 trillion in planned expenditures** .)

2. **Time and Cost Savings from 30–50% Faster Execution:** We estimated the potential savings from cutting project durations by one-third to one-half. Empirical data on megaproject overruns suggests that a **30–50% schedule reduction would largely eliminate typical delays**. In practice, reducing execution time can yield **significant cost savings** by avoiding extended overhead, labor, and inflation costs. For example, a **30% schedule compression on a large defense project can avoid roughly 30% of its cost**, since delays of that magnitude often inflate budgets by a similar percentage. By completing projects *faster*, organizations also **realize project benefits sooner** – whether it’s a defense capability available for use or a new aerospace product reaching the market earlier. Industry analyses indicate that advanced project management methods (e.g. digital twins, agile frameworks) can indeed “*realize a 30% reduction in time to market*” for complex aerospace products. We assume Allocc’s tools similarly enable a **30–50% schedule reduction**, which translates into roughly **30–50% of project value in time-related savings**. (This encompasses direct cost savings from avoiding protracted execution, as well as the opportunity to reallocate freed resources to new projects or revenue-generating activities sooner.)
3. **Additional Revenue (Value) Unlocked:** Faster execution unlocks “**unrealized revenue**” – the additional value that stakeholders can gain once chronic delays are removed. This can take two forms: **cost savings** (for project owners who avoid budget overruns and costly schedule slippage) and **new revenue opportunities** (for contractors who, by finishing early, can take on additional contracts or deliver more units in the same timeframe). In the defense sector, contractors would be able to complete more projects within a given period, effectively increasing

their throughput of billable work. Meanwhile, government agencies get capabilities earlier and avoid the extra expenditures caused by delays. For quantification, we approximate the unlocked value as **~40% of the annual megaproject spending** (a mid-point assuming not all time saved converts to immediate revenue, but substantial efficiency gains are realized). This 40% figure reflects a scenario in which projects that would normally run, say, 5 years are finished in 3 years – yielding a **33–50% time gain** and thereby freeing up roughly one-third of their budget for other uses or reducing one-third of the costs. This is consistent with observed overruns (30–45% waste) that could be eliminated. We will calculate this unlocked value for each region based on its annual megaproject spend.

4. **Allocc's Value-Based Pricing (30% of Unlocked Value):** Allocc employs a **value-based pricing model**, charging **30% of the unrealized revenue it helps unlock** for clients. In other words, Allocc's fee (and thus its potential revenue) is a fraction of the customer's gain from faster execution. To determine the TAM, we apply this 30% rate to the estimated unlocked value in each region. The TAM represents **All theoretical annual revenue** Allocc could generate if it were deployed across *all* eligible megaprojects in that region. Finally, we aggregate the regional TAM figures to arrive at the total Western defense sector TAM.

# Regional TAM Breakdown

The following sections detail the calculations for the United States, European Union, and United Kingdom, respectively, including the annual megaproject expenditures, potential value unlocked via 30–50% faster execution, and the resultant TAM for Alloc (at 30% of unlocked value). All monetary values are given in U.S. dollars for comparison, with original local currency figures noted where applicable.

## United States

The United States has by far the largest defense megaproject portfolio. In FY2024, the DoD budget is approximately \$875–975 billion (including base and supplemental funding), of which **procurement and R&D accounts for about \$300–315 billion** annually . This encompasses **Major Defense Acquisition Programs (MDAPs)** – big-ticket projects such as advanced fighter aircraft, naval vessels, missile defense systems, and space systems – as well as large civilian aerospace projects (e.g. NASA missions, new commercial aircraft development by U.S. firms). Virtually all of these programs exceed \$100M in value, and many run into the multi-billions. (For context, GAO reports that **76 major Pentagon programs have a combined planned cost of over \$2.1 trillion** , reflecting the enormous scale of U.S. megaprojects.)

**Annual Megaproject Spending (U.S.):** Based on defense investment budgets, we estimate **\$300 billion per year** is spent on qualifying megaprojects in the U.S. (roughly 37% of the total defense budget as noted) . This includes procurement of weapons and equipment (~20% of budget) and RDT&E (~17%). Additional relevant spending comes from large Department of Homeland Security projects (e.g. nationwide security IT systems or border

infrastructure) and major aerospace endeavors. However, defense acquisition dominates the figure.

**Unlocked Value from 30–50% Faster Execution:** If Allocc could reduce project timelines by 30–50%, the U.S. defense sector would see massive efficiency gains. Eliminating a ~40% schedule overrun on \$300B worth of projects translates to **on the order of \$120 billion in value unlocked per year**. This value is realized through cost avoidance and increased output. For example, avoiding typical schedule slips would save tens of billions that would otherwise be eaten up by extended labor, contractor fees, and inflation on long-running projects. A 30-50% time reduction also means contractors can complete more projects in a given time: a program that might have taken 10 years is delivered in 5–7 years, freeing those resources to start the next contract sooner. We estimate the **unrealized revenue unlocked in the U.S.** to be in the range of **\$90 billion (at 30% time savings) up to \$150 billion (at 50% time savings)** annually, with a midpoint around **\$120 billion/year** for analysis. This aligns with studies indicating 30–45% of megaproject effort is currently wasted in overruns, which Allocc could help recover.

**Allocc TAM (U.S.):** Applying Allocc’s **30% value-based fee** to the unlocked \$120B yields a **Total Addressable Market in the United States of roughly \$36 billion per year** (with a range from ~\$27B to ~\$45B depending on the actual percentage of time reduction achieved). In essence, if Allocc were used on every major U.S. defense/aerospace project, the *theoretical* annual revenue for Allocc could approach this magnitude. This enormous TAM reflects the outsized scale of U.S. defense programs and the equally large inefficiencies currently prevailing (billions in potential savings). It underscores that even capturing a small fraction of this market would be highly valuable for Allocc.

## European Union

European Union member states collectively have the second-largest defense investment outlay in the Western world. Driven by heightened security concerns, **EU defense spending reached €326 billion in 2024** , and importantly **defense investments (equipment procurement and R&D) comprised €102 billion** of that (over 30% of the total) . This includes pan-European projects and national programs in areas like fighter aircraft (e.g. the Future Combat Air System), ground combat vehicles, naval frigates and submarines, missile systems, space and satellite systems (e.g. Galileo), and advanced defense R&D. Many EU programs are collaborative among countries (to achieve scale), and virtually all significant new programs exceed \$100M. While each individual nation's budget is smaller than the U.S., the aggregated EU market is substantial and growing. (For instance, Germany's defense budget jumped to \$88.5B in 2024, with a special €100B fund for procurement , and France, Italy, Spain, Poland, etc. are all expanding investment in major systems.)

**Annual Megaproject Spending (EU):** From the EU Council data, about **€102 billion** (~\$110 billion) is spent annually on major defense **equipment procurement and R&D** in the EU . We will use **\$110 billion per year** as the estimate of EU megaproject spending. This figure covers big defense projects (fighters, ships, armor, etc.) as well as large security projects (e.g. EU border surveillance systems) and civil aerospace endeavors by European firms (Airbus's commercial jet development, Ariane rockets, etc., some of which involve public-private funding). It's worth noting that EU defense investment has been climbing rapidly (30% increase from 2021 to 2024) , so this TAM will likely grow in coming years.

**Unlocked Value from 30–50% Faster Execution:** European defense projects also suffer from delays and overruns – multinational coordination can

introduce additional complexity. Assuming Allocc enables a similar ~40% schedule reduction on EU megaprojects, the **unlocked value** in Europe would be on the order of **\$44 billion per year** (40% of \$110B). In a lower bound case (30% time saved), about \$33B in value is freed; in an upper bound (50% time saved), up to ~\$55B could be unlocked. These gains come from avoiding the prevalent inefficiencies in Europe's large projects – for example, many EU joint programs have seen timeline slips, which incur extra costs. Eliminating a significant portion of those delays means Europe's defense ministries get more capability for their money (or get the same for less). It also means European defense contractors (Airbus, BAE Systems, MBDA, Naval Group, etc.) could complete contracts faster and take on new ones, increasing revenue potential. In sum, **tens of billions of dollars in value** could be unlocked annually across EU defense and aerospace projects via 30–50% faster execution.

**Allocc TAM (EU):** With Allocc pricing at 30% of the client's gain, the TAM in the European Union is approximately **\$13 billion per year** (30% of ~\$44B). This could range from about **\$10 billion (at 30% time reduction)** to **\$16.5 billion (at 50% reduction)** in an optimistic scenario. The midpoint ~\$13B annual TAM underscores a very large market opportunity in Europe, albeit about one-third of the U.S. TAM due to the smaller base of spending. Nonetheless, as EU nations collaborate on *megaprojects like the next-generation fighter (FCAS) and main battle tank, or large naval programs*, the demand for schedule optimization tools could be high. Allocc's ability to shave years off schedules would be highly valuable given Europe's push to rapidly upgrade defenses.

## **United Kingdom**

The United Kingdom is analyzed separately here (though it's often counted within European totals) because of its distinct budget and programs post-Brexit. The **UK defense budget in 2024/25 is around £56.9 billion**

(about \$70–75B) , making it one of the largest in Europe. The UK historically allocates a high share of its budget to procurement and development; NATO reports have shown the UK exceeding the 20% equipment spending guideline. In fact, the UK's latest Equipment Plan (covering 2023–2033) set aside **£288.6 billion for equipment procurement and support** over ten years , which is nearly **£29 billion per year** (~\$36B) and represents roughly half of the defense budget. Key UK megaprojects include the **Dreadnought-class nuclear submarines** (a multibillion-pound program to renew the deterrent), the **Tempest future fighter jet** (in collaboration with Italy and Japan), new frigates and aircraft carriers, advanced weapons (e.g. the Warrior and Challenger tank upgrades, complex weapons development with MBDA), and major defense IT systems. Additionally, the UK has homeland security projects (e.g. National Cyber Security programs, border systems) and significant aerospace endeavors (Rolls-Royce engine programs, space launch initiatives) that can be considered.

**Annual Megaproject Spending (UK):** We estimate **\$35–40 billion per year** is spent on megaprojects in the UK. This corresponds to the ~£28.9B/year on equipment and support noted above , which includes new procurement. If we consider only **new capital procurement and R&D** (excluding in-service support costs), the figure might be a bit lower (perhaps ~\$20–25B purely on new projects), but many support programs (like long-term maintenance contracts or capability upgrades) also have project characteristics and could benefit from schedule reduction. For a comprehensive TAM, we'll use **\$36 billion/year** as the baseline of addressable project spend in the UK.

**Unlocked Value from 30–50% Faster Execution:** With a 30–50% reduction in timelines, the UK's defense sector could unlock significant value on its big programs. Using ~40% as an average, about **\$14.4 billion per year** of value is unlocked (40% of \$36B). In a range, this is roughly **\$10.8B (at 30% faster)** to

**\$18B (at 50% faster).** This reflects savings like avoiding cost growth on complex programs (the UK has struggled with cost increases on equipment plans, e.g. the National Audit Office has flagged affordability gaps ). If Allocc accelerates the Dreadnought sub program or the Tempest aircraft development by several years, the government could save huge sums in overhead and also field the capabilities sooner. Similarly, contractors like BAE Systems or Babcock could finish one contract earlier and move to the next, generating additional revenue. Thus, a rough **\$10–18 billion in annual value** stands to be gained through improved efficiency in UK megaproject execution.

**Allocc TAM (UK):** At 30% of the unlocked value, Allocc's TAM in the UK is approximately **\$4.3 billion per year** (midpoint), with a range from about **\$3.2B to \$5.4B**. While smaller in absolute terms than the US or EU, this is a sizable market relative to the UK's defense budget. The UK's focus on high-value projects (nuclear submarines, cutting-edge jets, etc.) means even a single project's delay can cost billions – representing a rich opportunity for Allocc's solution. Notably, the UK's defense procurement is undergoing reforms to speed up delivery, so a tool that can credibly cut timelines in half would be in demand.

# TAM Summary and Conclusion

Bringing together the regional analyses, we can summarize the TAM for Allocc in the Western defense/aerospace megaproject sector as follows:

| Region              | Annual Mega-Project Spend                                             | Potential Value Unlocked (30–50% faster)    | Allocc TAM (30% of Unlocked Value)       |
|---------------------|-----------------------------------------------------------------------|---------------------------------------------|------------------------------------------|
| United States (US)  | ~\$300 B per year <small>janes.com</small>                            | ~\$90 B to \$150 B per year (mid ~\$120B)   | ~\$36 B per year (range ~\$27B–\$45B)    |
| European Union (EU) | ~\$110 B per year <small>consilium.europa.eu</small>                  | ~\$33 B to \$55 B per year (mid ~\$44B)     | ~\$13 B per year (range ~\$10B–\$16.5B)  |
| United Kingdom (UK) | ~\$36 B per year <small>researchbriefings.files.parliament.uk</small> | ~\$10.8 B to \$18 B per year (mid ~\$14.4B) | ~\$4.3 B per year (range ~\$3.2B–\$5.4B) |

*Table: Estimated annual TAM for Allocc by region, based on megaproject spending and a 30% value capture. Figures are in USD.*

In total, the **Western defense megaproject TAM for Allocc is on the order of \$50 billion per year or more** (summing mid-point estimates: \$36B + \$13B + \$4B ≈ \$53B). This represents the theoretical maximum annual revenue if Allocc were universally adopted across all \$100M+ projects in the US, EU, and UK. The breakdown illustrates that the United States is the largest market (about two-thirds of the TAM) due to its massive defense procurement budget, while the EU and UK together make up the remaining one-third. Each region's TAM is driven by its **annual investments in big projects** and the **efficiency gap** that Allocc can help close.

It's important to note that these TAM figures are **value-based**: they hinge on Allocc delivering substantial time savings. The **unlocked “unrealized revenue”** is effectively the waste currently incurred through delays and inefficiencies – estimated at roughly 30–50% of project value – which Allocc can convert into real savings or additional output. Allocc's pricing at 30% of that gain means its revenue scales with the success it brings to clients. For instance, if Allocc helped save the DoD \$10 billion by accelerating schedules, it would earn \$3 billion in fees.

In conclusion, there is a **very large addressable market** for a schedule-optimizing solution like Allocc in the Western defense and aerospace sectors. With **hundreds of billions spent on megaprojects annually**, even moderate improvements in execution speed translate to tens of billions in value. Allocc's ability to capture a share of that value (via its pricing model) yields a TAM in the tens of billions of dollars per year. This analysis, grounded in current spending data and industry research on project overruns, highlights the opportunity by region: the U.S. offers the greatest immediate opportunity, while Europe (EU + UK) is also significant and growing given increased defense investment. By targeting projects >\$100M – which are often the ones plagued by the worst delays – Allocc can deliver outsized impact. The aggregated TAM of ~\$50B/year suggests that Allocc, if it became widely adopted, has a **multi-billion dollar revenue potential** and could drive a step-change in how megaprojects are delivered in the defense domain, **shrinking timelines by nearly half** and turning around the industry's well-known "over budget, over schedule" track record

# Resources

- Project Management Institute (PMI) and industry research on megaproject overruns .
  - <https://www.mckinsey.com/capabilities/operations/our-insights/increasing-transparency-in-megaproject-execution>
  - <https://www.lngindustry.com/liquid-natural-gas/04012018/breaking-the-status-quo/>
- McKinsey & Company – analysis of capital project performance .
  - <https://www.mckinsey.com/capabilities/operations/our-insights/increasing-transparency-in-megaproject-execution>
- Ingeniva white paper on cost of project delays .
  - <https://www.ingeniva.eu/2024/04/24/true-cost-of-project-delay/>
- U.S. Department of Defense budget data (FY2024) ; Congressional Budget Office (CBO) and Janes defense budget analysis.
  - <https://www.janes.com/insights/webinars/post/us-department-of-defense-fy24-budget-analysis>
- NATO and EU reports on defense spending and investment (NATO Secretary General's report; EU Council data on defense expenditure) .
  - <https://www.consilium.europa.eu/en/policies/defence-numbers/>
  - <https://researchbriefings.files.parliament.uk/documents/CBP-8175/CBP-8175.pdf>
- UK House of Commons Library – UK defense spending and Equipment Plan details .

- <https://commonslibrary.parliament.uk/research-briefings/cbp-8175/>
- Government Accountability Office (GAO) and RAND Corporation reports on defense acquisition programs and their costs .
  - <https://www.gao.gov/assets/gao-24-106831.pdf>
  - [https://www.rand.org/content/dam/rand/pubs/research\\_reports/R400/RR455/RAND\\_RR455.pdf](https://www.rand.org/content/dam/rand/pubs/research_reports/R400/RR455/RAND_RR455.pdf)