



# Faster Than Our Enemies: How TAIV™ Can Transform Pentagon Procurement

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The U.S. Department of Defense continues to face an acquisition dilemma: weapon systems take too long to develop, arrive after their moment of maximum utility has passed, and are vulnerable to technological obsolescence before they reach the field. President Donald J. Trump recognized this shortfall in the Defense Department acquisition system and issued an Executive Order on April 9, 2025, addressing the problem. He explained clearly,

*“It is the policy of the United States Government to accelerate defense procurement and revitalize the defense industrial base to restore peace through strength. To achieve this, the United States will rapidly reform our antiquated defense acquisition processes with an emphasis on speed, flexibility, and execution.”*

It is with this challenge in mind that this white paper offers an approach with great potential to meet the demands of getting the warfighter what is needed, when it is needed.

**Time as an Independent Variable (TAIV™)** offers a disciplined yet achievable solution. Building on the logic of Cost as an Independent Variable (CAIV), TAIV™ reframes time-to-field as the hard constraint, not just a performance outcome. This mindset has powered innovation and market dominance in fast-paced commercial sectors. With no statutory changes required, TAIV™ can be implemented inside existing FAR structures to accelerate delivery, reduce moral hazard, and improve acquisition outcomes for taxpayers and warfighters alike.

## I. The Problem: Weapons That Arrive Too Late

Today, the average Major Defense Acquisition Program (MDAP) takes 11 years from inception to fielding. As highlighted by the GAO in 2024, that is up from eight years just a few years ago—a 40% increase. Yet the threats we face are accelerating, not slowing. In the Indo-Pacific, China has demonstrated the ability to field new systems in three- to five-year cycles. If our systems continue arriving late, they risk becoming irrelevant before they ever deploy.

This is not just about bureaucratic inefficiency, it is a strategic liability. The Pentagon’s own panel on the QDR in 2010 said it best:

*“Useful increments of military capability should be defined as what can be delivered within five to seven years with no more than moderate risk.”*

Yet no structural discipline enforces that goal. Without a forcing function, the default approach remains: “take as long as it takes.”

## II. What Is TAIV™?

Time as an Independent Variable, or TAIV™, is both a methodology and a mindset shift. It introduces a fundamental change in how acquisition programs are structured and executed by treating time-to-field not as a hopeful estimate, but as an unyielding boundary condition. Just as Cost as an Independent Variable (CAIV) forced acquisition teams to stay within defined cost limits, TAIV™ imposes a similar constraint on the delivery timeline. In a TAIV™-driven program, the delivery date is not a milestone that can be negotiated away during execution; it is a defining parameter around which all other program elements must be designed and managed.

Importantly, TAIV™ is not simply a more aggressive approach to scheduling. A traditional schedule is a plan, a sequence of activities laid out with the understanding that adjustments can be made as issues arise. In contrast, TAIV™ treats the delivery date as a fixed requirement—the moment when the system must be in the hands of the warfighter to be effective. If that moment is missed, the opportunity to deter, influence, or prevail may be lost. TAIV™ reorients program execution around that hard truth.

This approach changes the kinds of decisions made at every level of the program. Requirements must be calibrated not to chase ideal performance, but to achieve what is truly needed within the available time. System designs must reflect what is achievable using existing technologies, rather than relying on breakthroughs that may or may not arrive in time. Development and test plans must be constructed with discipline, eliminating unnecessary rework, feature creep, and speculative improvements that do not directly contribute to operational readiness by the required date. Industry is encouraged to submit proposals grounded in realism, not ambition, because the source selection process will prioritize credible plans for on-time delivery.

# Faster Than Our Enemies: How TAIV™ Can Transform Pentagon Procurement

TAIV™ demands a culture shift that elevates time from a variable that can be traded to a constraint that must be respected. It requires that all stakeholders—requirements writers, program managers, engineers, testers, and contractors—align their efforts around a common understanding: the capability must arrive on time, or the mission it supports may fail. This focus introduces rigor, clarity, and urgency to the acquisition process. It forces early tradeoffs and sharpens decision-making, creating a more accountable path from program inception to delivery.

## III. Building on Proven Reform: From CAIV to TAIV™

TAIV™ is not a radical or untested concept. It is the logical progression from an earlier acquisition reform known as Cost as an Independent Variable, or CAIV. Introduced in the 1990s, CAIV reshaped the way acquisition teams approached program design by placing a firm ceiling on allowable cost. This constraint forced decision-makers to make early tradeoffs, prioritizing what capabilities were truly necessary and ensuring that programs could be delivered within a defined budget. The discipline imposed by CAIV helped acquisition teams resist the temptation to chase ideal solutions at the expense of affordability.

Some of the most successful acquisition programs of the past three decades have demonstrated the power of CAIV when applied with discipline. The Joint Direct Attack Munition (JDAM), for example, achieved a remarkably low unit cost by making affordability a firm design constraint from the outset. Similarly, the Small Diameter Bomb Increment I (SDB-I) delivered an effective and scalable capability by resisting unnecessary complexity and focusing on cost-effective precision. These programs worked not because they cut corners, but because they made hard decisions early—about scope, design, and technology maturity—to meet a well-defined cost ceiling.

TAIV™ adopts this same principle and applies it to time. Rather than treating schedule as a flexible planning artifact, TAIV™ requires programs to treat the delivery date as an unyielding design parameter. Just as CAIV required the team to design to a cost, TAIV™ requires them to engineer to a deadline. The key insight is that time, like cost, can and should be

used to drive tradeoffs. When a firm fielding date is established, decisions about capability, design complexity, and technology maturity are made with an eye toward what can be delivered within that window.

Both CAIV and TAIV™ seek to realign incentives across the acquisition enterprise by introducing a hard boundary that cannot be ignored. CAIV made cost everyone's business. TAIV™ does the same with time. Together, these two approaches offer a powerful framework for delivering capability that is not only affordable but also arrives when it can still shape outcomes on the battlefield.

## IV. Lessons from Commercial Industry: Time Drives Innovation

The idea of using time as a primary driver of design and delivery is not new. In fact, it has long been a foundational principle in fast-moving commercial markets, where time-to-market is often the decisive factor in whether a product succeeds or fails. Industries like automotive, consumer electronics, and telecommunications have spent decades refining methods to reduce development cycles and respond to rapidly shifting customer expectations. For them, meeting a launch window is not a goal, it is a constraint that shapes every upstream decision.

A well-documented example is the case of Daimler-Chrysler and the development of the Crossfire coupe in the early 2000s. At a time when car development typically took four to five years, the company set an ambitious target: bring a concept car to market in just 24 months. That meant halving the usual timeline. To do so, they treated the delivery date as fixed and used it as the primary criterion for selecting suppliers. They partnered with Wilhelm Karmann GmbH, a trusted but nimble firm known for convertible production, and structured the relationship around clear, time-bound incentives and penalties. The outcome validated the approach. The vehicle was not only delivered early but also met cost, quality, and sales objectives. The Crossfire became a commercial success, and Karmann was awarded follow-on work, demonstrating that when time is treated as an independent variable, it produces results.



## Faster Than Our Enemies: How TAIV™ Can Transform Pentagon Procurement

This example, now nearly 25 years old, illustrates that time-driven development is not some emerging trend. It is a proven discipline in industry. That is why the defense industrial base should be well prepared to adopt a TAIV™ mindset. The practices are familiar. The tools exist. What has been missing is the directive from government to make time a binding requirement. Given the commercial sector's long history of success with TAIV™-like strategies, making this pivot for government programs is not a leap—it is a return to principles they already understand and know how to execute. When time is fixed, innovation follows.

### V. Why TAIV™ Matters Now

The urgency to accelerate acquisition outcomes has never been more pressing. The speed and adaptability of our adversaries are increasing, and the pace of innovation in the commercial sector continues to widen the gap between what is technically possible and what is programmatically achievable within the Department of Defense. We now live in an era where emerging technologies—artificial intelligence, autonomy, hypersonics, space-based sensing—can redefine the battlespace in just a few years. Yet our own acquisition system still too often requires a decade or more to deliver a fielded capability. This growing mismatch between threat velocity and acquisition velocity creates unacceptable risk.

Secretary of Defense Pete Hegseth has made clear that accelerating capability to the field is not a preference; it is a priority. In his first guidance to the department, he wrote, *“We will rapidly field emerging technologies... We will remain the strongest and most lethal force in the world.”* That imperative cannot be met by slogans or surface-level reforms. It demands a change in how we design and govern acquisition strategies.

In recent years, various reform movements have emerged advocating for the abandonment of the Federal Acquisition Regulation (FAR) system altogether. The argument often goes that the FAR is the problem—that it imposes too much bureaucracy, too many rules, too many constraints to enable speed.

But this diagnosis mistakes the symptoms for the disease. The FAR is a toolset. Like any tool, it can be misused, misunderstood, or applied without skill. The deeper issue lies not in the regulatory framework, but in how incentives are structured, how authority is delegated, and how priorities are defined and enforced across the acquisition enterprise.

TAIV™ does not seek to circumvent or discard the FAR. Instead, it operates fully within its structure. The FAR already allows for time-certain requirements, performance-based contracts, and structured competition based on delivery realism. What is lacking is not permission, but conviction. TAIV™ provides a disciplined framework that uses the existing tools of acquisition in a new way—by making time-to-field the non-negotiable standard around which programs are designed, sourced, and executed. This is not about working around the system; it is about using the system intentionally, to drive outcomes that meet the strategic urgency of our moment.

Rather than pursue a path of deregulation and exceptionalism—carve-outs, waivers, or “moving fast and breaking things”—TAIV™ calls for a deeper understanding of how our system actually works. It focuses attention on the real levers of behavior: performance incentives, decision authority, and disciplined tradeoffs. It recognizes that the delays and cost overruns that plague major programs are not caused by the FAR itself, but by a culture that allows requirements to grow unchecked, schedules to slip without consequence, and complexity to overwhelm execution. TAIV™ forces the system to make deliberate choices, and in doing so, restores accountability to both government and industry.

At a time when many are looking for silver bullets outside the system, TAIV™ offers a better answer: transformation from within. It shows how we can achieve speed, predictability, and relevance—not by abandoning the framework, but by aligning it to the right objective. TAIV™ is not just a call to go faster. It is a strategy to deliver the right capability, at the right time, using the tools we already have.

### VI. How TAIV™ Works: Implementation Mechanics

At the core of TAIV™ is the principle that time-to-field must be elevated to the level of a Key Performance Parameter. Rather than treating schedule as a planning tool subject to adjustment, the program must be structured around a firm delivery deadline that is explicitly identified in the acquisition strategy. This time-certain-fielding requirement should be written directly into the request for proposal and treated as a critical evaluation criterion. Bidders must not only commit to meeting the delivery date but must also provide a credible, detailed engineering and program management plan that shows how they intend to do so. The realism of that plan should be evaluated alongside cost and technical performance.

To make this work in practice, incentives must be aligned to reinforce the importance of timely delivery. Contractors who meet the fielding date should receive full contractual value, with no ambiguity or debate about what constitutes success. If a contractor is able to deliver early without compromising performance or quality, bonus payments may be appropriate to recognize and reward exceptional execution. Conversely, if the delivery date is missed, the contract should include clear and enforceable penalties or fee reductions. These measures create a strong financial signal that time matters.

Another critical feature of TAIV™ is the discipline to control scope throughout the life of the program. Engineering changes should be limited to those that are essential for safety or offer significant cost savings without affecting the delivery timeline. The impulse to add features or chase new technology midstream must be resisted. Capability creep is one of the most common causes of program delay, and TAIV™ succeeds only when the delivery objective remains fixed and all design and execution decisions are made in service of that goal.

There will, however, be cases—especially in developmental programs pushing the state of the art—where technical risks materialize during execution. These risks may involve unanticipated integration challenges, delays in subsystem maturation, or limits of current manufacturing methods. In such cases, the traditional impulse is to preserve the original capability objectives, accept delays, and continue

pursuing a more ambitious end state. TAIV™ offers a different path. It holds time as the fixed constraint and requires that requirements and scope be adjusted when necessary to protect the fielding timeline. That means understanding, from the outset, what the threshold level of capability is—the minimum viable system that meets the warfighter's operational need within the required timeframe. Rather than allowing schedule to slip in service of ideal performance, TAIV™ ensures that the warfighter receives a capable and operational system when it is needed most, even if that means deferring objective-level enhancements to a follow-on increment. This approach not only delivers timely deterrence or battlefield advantage, it also creates a disciplined path for iterative improvement based on real operational feedback.

Finally, program managers must be empowered to execute against the time-certain objective. This includes using the acquisition authorities already available to streamline decisions and resolve issues quickly. It also requires that program timelines and delivery commitments be made visible and accountable not just within the program office but across the Department, to Congress, and to industry partners. Transparency and clarity about the intended outcome help reinforce the urgency and establish a common expectation of delivery.

Together, these implementation elements transform the acquisition program from a loosely managed set of activities into a focused campaign to deliver a needed capability by a specific date. TAIV™ turns time from a passive metric into an active driver of every decision.

### VII. The Payoff: What TAIV™ Delivers

The promise of TAIV™ lies in its ability to reshape outcomes, not just processes. When time is treated as an uncompromising driver rather than a negotiable detail, every aspect of acquisition begins to align with mission urgency. The result is speed with purpose. Programs that once drifted toward delays are instead anchored to the operational timelines of real-world threats. The average time to field shrinks, not through shortcuts, but through focus. Systems arrive not years too late, but when they are still relevant, still disruptive, and still able to alter an adversary's calculus.

## Faster Than Our Enemies: How TAIV™ Can Transform Pentagon Procurement

With speed comes discipline. TAIV™ extinguishes the moral hazards that too often infect large programs—the temptations to chase gold-plated features, to accommodate every good idea regardless of consequence, or to extend schedules in search of technical perfection. TAIV™ forces tradeoffs early, when they are manageable and cost-effective. It sharpens decision-making and restores clarity to what a program must deliver and by when. One of the most stubborn elements of the current acquisition system is its web of self-reinforcing interests that make it easier to keep funding a delayed program than to hold it accountable. Programs that slip timelines often receive more money, not less. Stakeholders—across services, industry, and even Congress—develop institutional incentives to sustain these efforts, regardless of whether they are on track to deliver meaningful capability. TAIV™ disrupts that dynamic. By making time-to-field a central performance requirement, it strips away the ambiguity that allows delay to masquerade as progress. It creates an unambiguous measure of program health and forces leadership to confront failure to meet operational timelines as a failure to meet mission need.

TAIV™ also restores fairness and realism to industry competition. Instead of rewarding the most optimistic PowerPoint slides or the most ambitious capability promises, it favors those who can deliver what matters, when it matters. Vendors who propose credible paths to timely fielding are elevated. Those who overpromise and underdeliver are exposed early. This changes the nature of the competitive environment, creating incentives for honesty, execution, and pragmatic innovation.

In doing so, TAIV™ brings coherence to defense budgeting. Programs built around firm time objectives fit more naturally within the structure of the Future Years Defense Program. They create predictable funding profiles, reduce churn in the planning, programming, budgeting, and execution process, and help Congress better understand what is being delivered for each dollar. TAIV™ does not just protect the taxpayer's investment, it helps make that investment visible and defensible.

Most importantly, TAIV™ improves the effectiveness of the warfighter. It delivers capability at the point of maximum need, not long after. A system that arrives

on time has the power to deter conflict, to close kill chains, or to protect lives in the fight. A system that arrives too late becomes a lesson learned. TAIV™ ensures that we are not delivering lessons. We are delivering advantage.

### VIII. Misconceptions Addressed

As with any serious reform, TAIV™ prompts questions—and sometimes resistance—from those steeped in the current system. It may also face skepticism from a different camp: those who advocate for a wholesale shift to a purely commercial acquisition model. While the appeal of commercial speed and simplicity is understandable, many of these proposals are rooted in a shallow understanding of how commercial markets actually function and overlook the unintended consequences that such a shift could impose on those responsible for delivering warfighting capability. Stripping away the protections, transparency, and accountability mechanisms built into the federal acquisition system may create new risks for taxpayers and for the mission. TAIV™ offers a more balanced path—one that learns from commercial discipline without abandoning the structure designed to serve the public interest.

Others may worry that TAIV™ will limit innovation by forcing programs to aim low. The opposite is true. Like the best commercial practices, TAIV™ does not reject innovation. It channels it. It drives creativity toward solutions that are achievable in the near term, rather than speculative capabilities that may require a decade to mature. Innovation under TAIV™ is not constrained, it is focused. It becomes a tool for delivery, not a justification for delay.

There is also a belief that to implement TAIV™ would require dismantling the acquisition system or abandoning the FAR. In fact, TAIV™ works within the system we already have. The FAR permits performance-based requirements. It allows for time-certain delivery terms, contractual incentives, and evaluation factors grounded in execution realism. What TAIV™ brings is not regulatory revolution, but disciplined application. It reframes how we use existing tools to align behavior with outcomes that matter. Rather than bypassing the system, TAIV™ helps us use it as it was intended—to deliver capability that is timely, effective, and accountable.

## IX. The Time to Act Is Now

DoD does not lack studies. It lacks discipline. TAIV™ offers an actionable framework, rooted in commercial precedent and validated in Pentagon pilots. If we make TAIV™ the norm rather than the exception, we can field capability faster than our enemies can adapt.

**Weapon systems should arrive when they matter, not after. TAIV™ is how we make that happen.**

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