

EDITION **01**

Self-Performed, Lean, Integrated

Three evidence-based briefings on self-performance, Lean, and integration for defense, federal, and secure manufacturing buyers.

3 ARTICLES · ≈21 PP

01

Where Facility Excellence Meets Defense Standards.

Ready • Secure • Lean

IH SERVICES

Where Facility Excellence Meets Defense Standards.

RESEARCH REPORT

Self-Performed, Lean, Integrated

Three Evidence-Based Briefings for Defense, Federal, and Secure Manufacturing Buyers

Ready • Secure • Lean

01

SELF-PERFORM

The risk-allocation choice secure portfolios cannot afford to get wrong.

02

LEAN

Standardize work, reduce avoidable failure, protect labor time for what matters.

03

INTEGRATED

One operating system, one data backbone, one accountability structure.

Sources: McKinsey · GAO · DOE · IFMA · CBRE · Deloitte · GSA · FAR

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Foreword

Most facility-management thought leadership reaches the same conclusion through different language: the model matters, the data matters, and the seams between vendors are where reliability and savings quietly disappear. For operators of secure facilities — defense industrial-base sites, federal installations, mission-critical manufacturing — those seams are not abstract. They are the place where readiness is lost.

This report synthesizes high-confidence findings from McKinsey, the U.S. Government Accountability Office, the Department of Energy, IFMA, CBRE, Deloitte, GSA, and the Federal Acquisition Regulation. We have not reweighted the evidence. Where source materials do not disclose company names, locations, portfolio sizes, or budget ranges, those details are treated as unspecified rather than inferred. Every quantified claim in this report is attributable to a cited public source.

We publish this for three reasons. First, we believe the field benefits when buyers can see the evidence on its own terms before they read any provider's pitch. Second, the three threads in this report — self-performance, Lean, and integration — are how IH Services thinks about its own operating model: R³ Secure FacilityOPS™ is, in plain terms, a self-performed, Lean-disciplined, integrated O&M operating system. Where the evidence corroborates that thesis, we are comfortable saying so. Where it qualifies the thesis, we say that too.

Third, and most important: the buyer's decision is consequential. A misjudged sourcing model in a secure portfolio does not produce a marginal financial outcome — it produces deferred maintenance, incident exposure, and readiness debt that the contractor cannot fix after award. This report is offered as a decision aid, not a marketing document.

Trust is not built through promises; it is built through visibility. That principle, drawn from CBRE's 2024 procurement research, is the single thread that runs through all three articles.

Marc Collings

SVP, North America IFS Client Solutions · IH Services

How to Use This Report

This report is a buyer’s reference, not a position paper. It is organized as three standalone articles that can be read in any order. Each article opens with an at-a-glance strip, an executive summary, the evidence in plain prose, a visual decision aid, an IH Services perspective overlay, and an FAQ. Sources are listed at the end of each article and consolidated at the back of the report.

The Three Articles

<p>ARTICLE 1 — SELF-PERFORM</p> <ul style="list-style-type: none"> • When self-perform, subcontract, or hybrid is the right choice • Evidence on cost, reliability, compliance, response time • F-35, Red Hill, IFM consolidation case studies • FAR-aligned procurement guidance • Best fit: operations directors, defense procurement, CFOs 	<p>ARTICLE 2 — LEAN</p> <ul style="list-style-type: none"> • Why Lean is a control strategy, not a cost-cutting program • DOE, McKinsey, Deloitte, IFMA maintenance data • Four wastes Lean removes from secure portfolios • Reactive vs. preventive vs. predictive posture • Best fit: site leadership, EHS, asset strategy 	<p>ARTICLE 3 — INTEGRATED O&M</p> <ul style="list-style-type: none"> • What “one operating system” actually means • Why fragmented multi-vendor delivery breaks down • Deloitte, CBRE, GSA evidence on integration • FAR-aligned commercial language for IFM • Best fit: procurement, finance, CIO/CTO
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How to Read the Perspective Overlays

Throughout the report, you will see callout boxes marked “How IH Services Sees It.” These are perspective overlays, not data claims. They translate the evidence into the language of R³ Secure FacilityOPS™ — the proprietary operating system we use with our clients. Every quantified claim in the body remains attributable to its public source; the overlay is provider perspective layered on top, clearly marked.

At a Glance

<p>ARTICLES 3</p>	<p>SOURCES 8 organizations</p>	<p>DECISION AIDS Visual matrices</p>	<p>AUDIENCE Buyers, ops, CFO</p>
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2	Lean Facility Management in Secure Environments <i>Lean as a control strategy. Evidence from DOE, McKinsey, IFMA, Deloitte, GAO.</i>
3	Integrated O&M and One Operating System <i>What integration changes operationally. Evidence from Deloitte, McKinsey, GSA, IFMA, CBRE, GAO.</i>
A	Open Questions, Limitations, and Consolidated Sources <i>Editorial note on the evidence base and a single bibliography.</i>
B	About IH Services <i>Who we are, how R³ Secure FacilityOPS™ works, and how to engage us.</i>

Article 1. Self-Performed vs. Subcontracted Facility Management

OWNER Defense, federal, and secure manufacturing buyers	CADENCE Read time: 12–15 minutes	EVIDENCE McKinsey · GAO · FAR · CBRE	KEY VISUAL Decision-matrix comparisonCards
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Executive Summary

For secure portfolios, the self-perform versus subcontract decision is not a philosophical debate. It is a risk-allocation choice that affects response time, reliability, compliance exposure, labor flexibility, and the credibility of the commercial model. The evidence does not support an absolutist answer. It points toward a capability-based approach: self-perform critical hard services where uptime, technical knowledge, or mission sensitivity create competitive or operational advantage; subcontract noncore or highly variable work where scale, specialist tools, or fragmented supplier markets favor an external provider; and use hybrid models when the organization needs temporary outside help while it builds internal capability (McKinsey, GAO, FAR).

In manufacturing environments, McKinsey notes that soft services such as landscaping and janitorial are commonly outsourced, while hard services such as utility-equipment maintenance are typically kept in-house. In defense sustainment, GAO’s review of the F-35 found that a contractor-led support structure coincided with slow repair times, more than 10,000 components awaiting repair, and fleet mission-capable rates of about 55% in March 2023, prompting GAO to conclude that DoD should reassess the future mix of government and contractor roles. That is the practical lesson for federal buyers: the right answer is rarely “all in-house” or “all outsourced.” It is “keep control where failure is expensive, buy flexibility where capacity is volatile, and govern the interfaces with measurable outcomes and transparent data” (McKinsey, GAO).

Why the Delivery-Model Question Matters Now

The operating-model question matters more today because cost pressure is rising at the same time that federal and industrial facilities are contending with labor shortages, deferred maintenance, cybersecurity obligations, and tighter scrutiny over contractor performance. CBRE’s 2024 procurement research, based on input from more than 40 organizations, found that supply-chain disruptions remained the top FM procurement risk for 29% of respondents, labor shortages remained in the top three, and the most common financial-stability response was raising visibility into supplier health data. That supports a simple buying principle: trust is not built through promises; it is built through visibility, especially when services are outsourced (CBRE).

Federal acquisition policy reinforces the same discipline. FAR performance-based service contracts are supposed to include a performance work statement, measurable standards for quality, timeliness, and quantity, and performance incentives where appropriate. For defense and federal buyers, that means the sourcing decision should not begin with labor categories or vendor

slogans. It should begin with required outcomes, acceptable response windows, compliance expectations, and the data needed to prove them (FAR).

<p>TOP RISK</p> <p>Supply-chain disruption (29%)</p>	<p>TOP-3 RISK</p> <p>Labor shortages</p>	<p>LEADING RESPONSE</p> <p>Supplier-health visibility</p>	<p>SOURCE</p> <p>CBRE 2024</p>
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Figure 1.1: Procurement Risk Posture (CBRE 2024). Four data points buyers should pressure-test against any proposed delivery model.

What the Evidence Says: Cost, Reliability, Compliance, Response

Cost

On cost, outsourcing can clearly create value when the portfolio is fragmented, spend visibility is poor, and the category is nonstrategic or subscale. McKinsey describes a retailer that reduced FM spending by 15% after separating categories that should stay in-house from those suited for third-party delivery. It also describes a global financial institution spending \$450 million annually across thousands of sites and more than 10,000 vendors; after consolidating to one provider and standardizing processes, it reduced costs by more than \$150 million over three years. Those are powerful outsourcing cases — but they are also cases where the value came from standardization, transparency, and supplier consolidation, not from subcontracting alone (McKinsey).

The insourcing case strengthens when the service is strategically important, when performance indicators are mission-critical, or when the organization already has the governance and technical capability to manage the work effectively. McKinsey documents a consumer-goods company that insourced indirect procurement after outsourcing failed to fit its culture and missed savings targets; after bringing the function back, the company achieved additional cost reductions of more than 10% in just over a year. The principle for facility management is similar: mature internal capability can outperform an external model when the work is critical, data are good, and leadership will sustain discipline (McKinsey).

<p>15%</p> <p>RETAILER FM REDUCTION</p>	<p>\$150M</p> <p>IFM CONSOLIDATION, 3 YRS</p>	<p>>10%</p> <p>INSOURCING REVERSAL</p>
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Figure 1.2: Documented Sourcing Outcomes (McKinsey). Three case results illustrating the range of value sources — not the average a buyer should expect. Outcomes depend on portfolio, baseline, and execution discipline.

Reliability and Response Time

On reliability and response time, the strongest evidence favors retaining direct control over critical systems and interfaces. GAO’s 2023 F-35 sustainment review found that DoD still relied heavily on the contractor to lead and manage sustainment even as the services were expected to assume more control by 2027. GAO linked readiness shortfalls in part to depot and organizational

maintenance challenges, including slow component repair times, a lack of technical data, and insufficient training. While aircraft sustainment is not identical to facility management, the lesson is directly relevant for secure facilities: when the mission depends on technical knowledge, documentation access, and real-time decision authority, overreliance on external control can degrade responsiveness and resilience (GAO).

Compliance

On compliance and hazardous-site oversight, GAO’s Red Hill review is equally instructive. It found that the government-run site operated through a complex structure involving several DoD organizations and multiple contractors performing essential maintenance and repair. GAO reviewed 16 contracts and described how the Navy changed its approach after the leaks, including additional oversight actions after a contractor unintentionally released hazardous firefighting foam concentrate. In secure or high-consequence facilities, that kind of contract complexity can multiply the number of interfaces that must be governed. Subcontracting does not eliminate accountability; it often increases the management burden needed to preserve it (GAO).

Decision Matrix for Buyers

The visual below is a conversion-ready executive aid for sourcing discussions, internal alignment, and board or procurement review. It is a synthesis of the cited studies; actual outcomes depend on portfolio size, labor market, clearance requirements, and contract design.

SELF-PERFORMED	SUBCONTRACTED	HYBRID
<ul style="list-style-type: none"> • Cost: can outperform outsourced where category is strategic and capability is mature (McKinsey) • Reliability/compliance: strongest where mission-critical work needs retained know-how and sensitive-data handling • Response: fastest when cleared technicians, site knowledge, and dispatch authority are internal • Best fit: operations directors, secure manufacturing leaders, defense site commanders 	<ul style="list-style-type: none"> • Cost: strong when categories are noncore, fragmented, or subscale (15% retailer; \$150M IFM — McKinsey) • Reliability/compliance: works best for low-criticality services governed by measurable outcomes and audits • Response: can be slower when mobilization, approvals, or multi-tier subcontracting add friction • Best fit: CFOs, procurement officers, portfolio managers needing flexibility 	<ul style="list-style-type: none"> • Cost: effective when external help bridges to internal capability; integrators stabilize fragmented MRO (McKinsey) • Reliability/compliance: often best for secure portfolios — self-perform critical hard services, outsource soft and overflow • Response: balanced — preserves immediate external scale while keeping critical response internal • Best fit: federal buyers, defense procurement leads, transformation sponsors

Figure 1.3: Delivery-Model Decision Matrix. Evidence base: McKinsey, GAO. Use as a synthesis tool, not a prescription.

How IH Services Sees It

PROVIDER PERSPECTIVE — NOT A DATA CLAIM

The evidence in this article maps cleanly onto IH Services' own operating posture. We self-perform integrated O&M for secure environments because mission-critical hard services are exactly the category McKinsey identifies as best kept inside, and because the F-35 and Red Hill reviews show what happens when retained know-how, documentation access, and dispatch authority leak across too many vendor interfaces.

Our model is not a refusal to outsource; it is a refusal to outsource the part of the work where failure is expensive. Where soft services or surge demand favor scale and competition, we either self-perform under cross-trained crews or partner with a single governed counterpart (covered in Article 3). The line we draw is the same line the buyer should draw: keep control where failure is expensive, buy flexibility where capacity is volatile.

In R³ Secure FacilityOPS™ terms: self-performance is how we drive Reliability (technical depth) and Responsiveness (escort-free cleared dispatch). Hybrid coverage is how we drive Reduction (cost flexibility) without giving up control of the work that matters.

Case Evidence from Defense and Industrial Operations

A defense case is clear in the F-35 program. GAO reported that maintenance challenges were materially affecting readiness, with mission-capable rates around 55% in March 2023 and more than 10,000 components waiting for repair. GAO also found that DoD had not yet determined the desired mix of government and contractor roles or secured all the technical data needed to support that transition. For federal buyers, the takeaway is straightforward: if the future-state operating model assumes more government control, the contract strategy has to secure the data rights, training pathways, and resource plan to make that control real — not rhetorical (GAO).

An industrial case appears in McKinsey's FM sourcing work. McKinsey reports that one manufacturer established a regular auditing cadence with the finance team to review IFM initiatives and ensure that savings actually flowed to the bottom line. That detail matters. Outsourcing often fails not because the provider cannot perform, but because the client does not maintain commercial discipline after award. A credible post-award governance model should verify savings realization, service quality, asset performance, and contract conformance together — not in separate silos (McKinsey).

Procurement Guidance for Defense, Federal, and Secure Manufacturing Buyers

Three disciplines distinguish solicitations that produce durable outcomes from solicitations that produce churn.

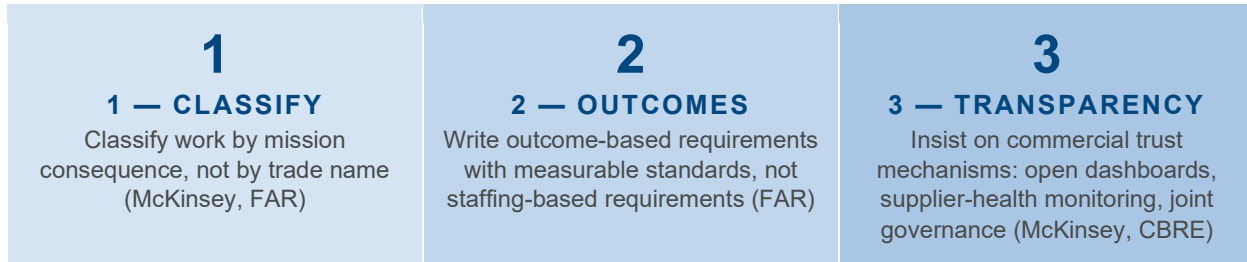


Figure 1.4: Three procurement disciplines that distinguish a defensible solicitation from a vague one.

Classify first. If downtime could affect production continuity, life safety, server rooms, controlled environments, or classified operations, the presumption should favor self-performance or a hybrid model with direct retained control. If the work is standardized, low-criticality, geographically variable, or labor-volatile, subcontracting is often the more disciplined commercial choice.

Write outcomes second. FAR requires measurable standards and methods for assessing performance. In practice, that means response-time bands, preventive-compliance targets, rework thresholds, audit documentation requirements, and escalation protocols should all be defined before the contract is competed. A vague statement of work pushes risk forward into execution, where it becomes costlier and harder to manage.

Build trust through transparency third. McKinsey's collaboration research shows that transparency over cost is central to high-trust supplier relationships, while CBRE's procurement research shows that visibility into supplier health is emerging as the primary response to financial-stability risk. Trust is operationalized through transparency — not sentiment.

Frequently Asked Questions

When should a defense or federal site self-perform facility services?

Self-performance is strongest when services are mission-critical, technically sensitive, or dependent on retained site knowledge and direct response authority. McKinsey explicitly notes that in manufacturing, utility-equipment maintenance is often retained in-house, and GAO's F-35 work shows how gaps in technical data and control can undermine readiness when critical sustainment remains overly contractor-led (McKinsey, GAO).

When is subcontracting the better commercial choice?

Subcontracting is usually the better fit for standardized, lower-criticality, or variable-demand services where specialist scale and supplier competition outweigh the value of retained internal labor. McKinsey's documented savings cases came from category clarity, supplier consolidation, and better sourcing discipline — not simply from moving work outside (McKinsey).

Is a hybrid model usually the safest choice for secure manufacturing?

Often, yes. Hybrid models allow buyers to keep critical hard services and incident response under direct control while outsourcing soft services, overflow work, or specialist tasks. McKinsey also

notes that external MRO integrators can be useful temporarily when spend data are poor or suppliers are fragmented, after which some work may be brought back in-house (McKinsey).

What should be in the solicitation regardless of model?

A defensible solicitation should define required outcomes, measurable standards, assessment methods, and incentives. FAR is explicit on these elements, and federal buyers should also require reporting transparency, governance cadence, and savings-validation mechanisms to preserve trust and discipline after award (FAR, McKinsey, CBRE).

Sources

MCKINSEY

Six emerging trends in facilities management sourcing · Rethinking the balance in outsourcing indirect procurement · Taking supplier collaboration to the next level.

U.S. GAO

F-35 Aircraft: DOD and the Military Services Need to Reassess the Future Sustainment Strategy (GAO-23-105341) · Red Hill Fuel Storage: DOD's Contract Approaches and Oversight before and after the 2021 Fuel Leaks (GAO-25-106572).

CBRE

Facilities Management Procurement Perspectives: Risk, Economic Stability and Inflation (2024).

FAR / DEAR

FAR 37.601 General · FAR 37.602 Performance Work Statement · DEAR 970.1100-1 Performance-Based Contracting.

Article 2. Lean Facility Management in Secure Environments

OWNER Site leadership, EHS, asset strategy, CFOs	CADENCE Read time: 12–15 minutes	EVIDENCE DOE · McKinsey · IFMA · Deloitte · GAO	KEY VISUAL Reactive/Preventive/Predictive comparisonCards
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Executive Summary

Lean facility management in secure environments is not a blunt cost-cutting exercise. It is a control strategy for reducing operational drag without weakening readiness, compliance, or resilience. In federal and defense portfolios, the financial backdrop is severe: GAO reports that DoD and civilian deferred-maintenance backlogs more than doubled from \$171 billion to \$370 billion between fiscal years 2017 and 2024, while DoD alone reported a \$181.1 billion deferred-maintenance backlog in 2025. Lean, therefore, should be understood as a disciplined answer to scarcity: standardize work, reduce avoidable failure, improve data quality, and protect labor time for the tasks that actually preserve mission and asset life (GAO).

The maintenance evidence is consistent. DOE’s O&M guide estimates that preventive maintenance can produce 12% to 18% cost savings over reactive programs and that predictive approaches can add another 8% to 12% over preventive models. DOE also cites potential reductions of 25% to 30% in maintenance costs, 35% to 45% in downtime, and 70% to 75% in breakdowns when predictive practices are implemented well. McKinsey’s industrial reliability work points in the same direction, estimating 18% to 25% lower maintenance costs and 5% to 15% higher asset availability in heavy industry, with distributed fixed-asset operators already seeing 20% to 30% maintenance-cost reductions in advanced programs (DOE, McKinsey).



Figure 2.1: The Scarcity Backdrop and the Maintenance-Strategy Evidence (GAO, DOE). Lean is a disciplined answer to the first two numbers via the second two.

Why Lean Matters More in Secure Portfolios

Secure environments magnify the cost of waste. In a standard commercial office, a delayed work order is often an inconvenience. In a secure manufacturing line, a hardened utility plant, or a federal installation with mission IT loads, the same delay can create compliance risk, production loss, incident-response friction, or degraded readiness. GAO’s 2026 joint-bases review is stark: at some sites, officials described HVAC, water, and plumbing systems as being “on triage,” said preventive maintenance was no longer being considered, and warned that under-resourcing was causing cascading failures across installations. Lean is what stops triage from becoming the operating model (GAO).

A second reason Lean matters is labor scarcity. CBRE’s 2024 FM procurement research found that labor shortages remain one of the top FM risks, driven by aging workforces, shortages of qualified technical skills such as HVAC, and fewer younger workers entering the trades. Lean programs do not create labor out of thin air, but they do increase the amount of productive work each hour can support by reducing duplicate dispatches, false alarms, avoidable repeat failures, and low-value manual coordination (CBRE, IFMA).

What the Maintenance Data Say

IFMA’s Europe operations-and-maintenance benchmark shows a portfolio mix that many organizations will recognize: 54% of maintenance costs allocated to preventive work, 28% to reactive work, and 18% to predictive work. Nearly 90% of respondents reported preventive plans for fire services, electrical systems, and HVAC, yet 69% still tracked maintenance in Excel or manual spreadsheets. That combination is revealing. Many facilities understand the logic of preventive maintenance but still lack the digital backbone needed to run Lean execution at speed and consistency (IFMA).

Deloitte’s predictive-maintenance guidance adds an industrial lens: poor maintenance strategies can reduce productive capacity by 5% to 20%, and unplanned downtime costs industry an estimated \$50 billion each year. McKinsey’s work on digitally enabled reliability then compounds the point by showing that the value is not limited to better prediction. The deeper gains come from digitizing the whole maintenance and reliability system — asset strategy, work prioritization, scheduling, execution, and performance management — so that the operation can move from hindsight to foresight (Deloitte, McKinsey).

PM SHARE 54% (IFMA)	REACTIVE 28% (IFMA)	PREDICTIVE 18% (IFMA)	MANUAL TRACKING 69% (IFMA)
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Figure 2.2: IFMA Europe O&M Benchmark — portfolio mix and digital readiness. The gap between PM logic and PM execution capability is where most Lean programs find immediate runway.

Lean Operating Model — Four Wastes to Remove

A Lean FM program in a secure environment should start by removing four recurring forms of waste. Together they explain why reactive programs are expensive even when they look simpler on paper.

<p>FAILURE-DRIVEN</p> <p>Repeated breakdowns, emergency overtime, rush parts, unplanned downtime. DOE’s preventive- and predictive-savings evidence explains why reactive looks cheap and isn’t.</p>	<p>COORDINATION</p> <p>Too many handoffs, approvals, and disconnected systems. IFMA: dashboards should surface open requests, aging WOs, completion rates, backlog, and utilization in one place.</p>
<p>VARIATION</p> <p>Inconsistent procedures, uneven technical quality, different rules by building or shift. IFMA warns that overgrown KPI lists distort priorities; Lean needs a small outcome set.</p>	<p>PORTFOLIO</p> <p>Underused or low-value assets kept in circulation and funded for deterioration. GAO: federal buildings cost >\$10.3B/yr to operate; disposing of unneeded ones reduces backlog.</p>

Figure 2.3: Four Wastes a Lean FM Program Removes (DOE, IFMA, GAO). The fourth is the one most often missed — Lean FM includes asset rationalization, not only better wrench-turning.

Executive Maintenance Posture Matrix

REACTIVE <ul style="list-style-type: none"> • “Run it till it breaks” (DOE) • Poor strategies cut productive capacity 5–20% (Deloitte) • Unplanned downtime: ~\$50B/year industry-wide (Deloitte) • Strength: lowest planning burden short-term • Liability: emergency labor, downtime, compliance misses • Best fit: no one — never the design state on critical assets 	PREVENTIVE <ul style="list-style-type: none"> • 12–18% savings vs reactive (DOE) • ~54% of maintenance cost in benchmark portfolios (IFMA) • Strength: auditable, standardizable baseline for life-safety, utilities, regulated systems • Liability: can over-service low-risk assets if intervals are not risk-adjusted • Best fit: operations directors, compliance leaders, federal FM managers 	PREDICTIVE / CONDITION <ul style="list-style-type: none"> • 8–12% savings over PM; 25–30% lower maintenance cost overall (DOE) • 18–25% lower maintenance cost; 5–15% higher availability (McKinsey) • Strength: reduces breakdowns and unnecessary servicing; improves forecast accuracy • Liability: requires data quality, integration, training, and governance • Best fit: CFOs, smart-manufacturing leaders, asset strategy owners
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Figure 2.4: Executive Maintenance Posture Matrix. Sources: DOE, IFMA, Deloitte, McKinsey. Values are directional ranges from cited studies, not guaranteed outcomes for every site.

How IH Services Sees It

PROVIDER PERSPECTIVE — NOT A DATA CLAIM

Lean inside R³ Secure FacilityOPS™ runs on eight tools — 5S, SOP Playbooks, Gemba Walks, Root Cause Analysis, Value Stream Mapping, DPMO tracking, the 8 Wastes (DOWNTIME), and Kaizen events. The four wastes in Figure 2.3 are the operational surface area DOWNTIME calls out: Defects (variation), Overproduction (over-servicing), Waiting (coordination), Transport / Inventory / Motion / Non-use of Skills / Excess processing — every category in the source evidence is named in the toolkit.

Our sequencing in secure environments matches the evidence: stabilize the preventive base first, clean the work-order data, define a small outcome KPI set, and only then layer predictive instrumentation onto the assets where the data and risk profile justify it. That sequencing is what the DOE 12–18%, then 8–12%, then 25–30% numbers actually describe in practice.

In R³ terms: Lean is the Reduction pillar made concrete. Reliability protects what you have; Responsiveness shrinks the time between failure and recovery; Reduction is the discipline that prevents the failure from being scheduled into the year in the first place.

What Lean Looks Like in Practice

In secure environments, Lean FM usually begins with a stable preventive base. That means asset criticality rules, standard job plans, spare-parts logic, shutdown protocols, and a work-order system that can track completion and exceptions. Only after that base is stable should organizations scale condition-based monitoring, remote triage, or AI-supported dispatch. McKinsey warns that predictive tools alone are not a panacea; organizations capture the most value when they digitize the end-to-end maintenance and reliability system rather than pilot isolated technologies indefinitely (McKinsey).

The buying-guide implication is important. Lean programs should be procured and governed as business systems, not as isolated work-order programs. That means trust through transparent data, collaboration through joint governance, and commercial-model discipline through a limited set of outcome metrics: preventive-compliance rate, backlog age, repeat-failure rate, mean time to dispatch, critical-asset downtime, and audit-closeout performance. Without those controls, “Lean” becomes another slogan layered on top of reactive behavior (IFMA, FAR).

1	2	3	4	5	6
PM COMPLIANCE	BACKLOG AGE	REPEAT FAILURE	DISPATCH	DOWNTIME	AUDIT CLOSE
% PMs completed on time	Aging of open WOs	Same asset, same fault	Mean time to dispatch	Critical-asset downtime	Time-to- closure on findings

Figure 2.5: A Minimal Outcome KPI Set for Lean FM. IFMA warns against overgrown KPI lists; six measures connect to readiness, compliance, sustainability, and customer impact.

Frequently Asked Questions

Is Lean FM mainly a cost-reduction program?

No. In secure environments, Lean is best understood as a control strategy that reduces waste while improving readiness, compliance, and budget predictability. The underlying research consistently links proactive maintenance with lower cost and higher uptime, but the mechanism is operational discipline, not indiscriminate cuts (DOE, McKinsey, GAO).

What is the fastest way to begin a Lean FM transition?

Start by stabilizing preventive maintenance on critical assets, cleaning up work-order data, and defining a short KPI set tied to outcomes. IFMA’s research shows many teams still rely on manual tracking, which makes Lean harder to scale and audit (IFMA).

Does predictive maintenance replace preventive maintenance?

Not entirely. Predictive maintenance improves timing and targeting, but secure environments still need preventive routines for life-safety systems, inspections, and regulated assets. The strongest programs use preventive work as the base layer and predictive tools where the data and risk profile justify them (DOE, IFMA).

Why does Lean matter to CFOs?

Because it converts hidden operational volatility into more forecastable spend. DOE, McKinsey, and Deloitte all show that proactive and digitally enabled maintenance can reduce cost, improve uptime, and lower the frequency of unplanned expenses that destabilize budgets (DOE, McKinsey, Deloitte).

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U.S. DOE

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MCKINSEY

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IFMA

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DELOITTE

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FAR

FAR 37.601 General.

Article 3. Integrated O&M and One Operating System

OWNER	CADENCE	EVIDENCE	KEY VISUAL
Procurement, finance, ops, CIO/CTO	Read time: 12–15 minutes	Deloitte · McKinsey · GSA · IFMA · CBRE · GAO	Fragmented/Brokered/Integrated comparisonCards

Executive Summary

Integrated Operations and Maintenance is best understood as one operating system for the built environment: one governance model, one data backbone, one dispatch logic, one accountability structure, and one performance language. In secure portfolios, that matters because risk accumulates in seams — between vendors, between sites, between data systems, and between contracts. Deloitte’s 2025 CRE and FM outlook notes that integrated FM is gaining traction because organizations want greater value across diverse portfolios while internal teams become leaner and more dependent on specialist suppliers. McKinsey reaches the same conclusion from a sourcing perspective, reporting that integrated FM is taking a larger share of the outsourcing market and that companies are using IFM to streamline decision-making, standardize service quality, and reduce costs (Deloitte, McKinsey).

The case evidence is practical rather than theoretical. McKinsey describes a global financial institution that consolidated more than 10,000 suppliers to one provider, standardized processes, and reduced costs by more than \$150 million over three years. GAO, by contrast, shows what fragmented visibility looks like in federal settings: at four of the five joint bases it reviewed, DoD could not obtain complete, reliable facility-funding data by component, contributing to perceptions of imbalance and weaker decision support. Integrated O&M is the governance answer to that fragmentation. It creates trust through transparency, improves collaboration by forcing a shared operating picture, and strengthens commercial-model discipline by aligning contracts to common outcomes (McKinsey, GAO, GSA).

Why Fragmented Delivery Breaks Down

Fragmented models can function in steady-state conditions, especially when portfolios are simple and work volumes are low. They struggle when the environment becomes complex: mixed criticality, multiple sites, rising compliance expectations, labor scarcity, or incident-response demands that cross trades. McKinsey’s supplier-collaboration work explains why. High-performing partnerships require transparent cost information, clearly defined cross-functional responsibilities, and trust built through information sharing over time. In fragmented FM, those conditions are harder to sustain because each supplier manages only part of the picture and incentives are rarely synchronized (McKinsey).

Federal operating experience shows the same pattern from another angle. GSA’s shared-services framework argues that modern ecosystems backed by data and business standards improve

management efficiency and align services to outcome-based goals. That premise applies directly to O&M: when the service ecosystem is standardized and governed through evidence-based performance management, leaders can see what is happening, compare performance across portfolios, and intervene faster. Fragmented models make that harder because data formats, escalation paths, and reporting definitions vary by vendor and contract (GSA).

What Integration Changes Operationally

Three changes recur across the evidence base: integration changes decision speed, cost control, and performance visibility — in that order.

<p>DECISION SPEED</p> <p>IFMA: a well-designed operational dashboard consolidates open service requests, work-order age, completion rates, backlog trends, and technician utilization into one interface. That turns management from retrospective reporting into live supervision. In secure environments, delayed action quickly becomes a security or mission issue.</p>
<p>COST CONTROL</p> <p>McKinsey’s large-portfolio case shows consolidating providers and standardizing processes can materially reduce spend — but also that IFM implementations fail when procurement and operations are misaligned. Integration must mean shared standards calibrated to the asset base, validated jointly by procurement, finance, and operations.</p>
<p>PERFORMANCE VISIBILITY</p> <p>CBRE reports modern FM platforms increasingly create a “single pane of glass” through AI, IoT, and analytics integration. Its 2025 technology report cites 39B data points from 300 sources, 15M work orders processed annually, 5% reduction in duplicate WOs, and prediction of 80% of actual SLA misses in certain applications. Vendor-reported; outcomes vary by portfolio.</p>

Figure 3.1: What Integration Actually Changes (IFMA, McKinsey, CBRE). The order is operationally meaningful: speed first creates the data that exposes the cost; cost discipline then funds the visibility that closes the loop.



Figure 3.2: Integration at Scale (McKinsey, CBRE). The 20% figure is vendor-reported and varies by portfolio, geography, and partnership model — useful as illustration, not as a universal market average.

Operating-Model Comparison

<p>FRAGMENTED MULTI-VENDOR</p> <ul style="list-style-type: none"> • Separate systems; variable reporting definitions; diffuse accountability • Slower cross-trade coordination and more interface risk 	<p>BROKERED COORDINATION</p> <ul style="list-style-type: none"> • Central coordination but execution visibility remains indirect • Better than fragmented; still dependent on vendor handoffs 	<p>INTEGRATED O&M (ONE OS)</p> <ul style="list-style-type: none"> • One governance framework, common KPIs, aligned escalation paths, centralized performance data
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<ul style="list-style-type: none"> • Can hide duplication and make audit defense harder • Best fit: legacy portfolios with low criticality and little change 	<ul style="list-style-type: none"> • Improves administrative simplicity; may still lack field-level control • Best fit: procurement teams focused mainly on consolidation 	<ul style="list-style-type: none"> • Faster issue triage, clearer dispatch, better cross-trade orchestration • Strongest for trust, transparency, and commercial discipline when paired with measurable outcomes and joint governance • Best fit: defense/federal buyers, operations directors, CFOs, secure manufacturing leaders
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Figure 3.3: Operating-Model Comparison. Evidence base: Deloitte, McKinsey, GSA, IFMA, CBRE, GAO. Descriptions are synthesized from the cited sources and adapted for secure-environment decision-making.

How IH Services Sees It

PROVIDER PERSPECTIVE — NOT A DATA CLAIM

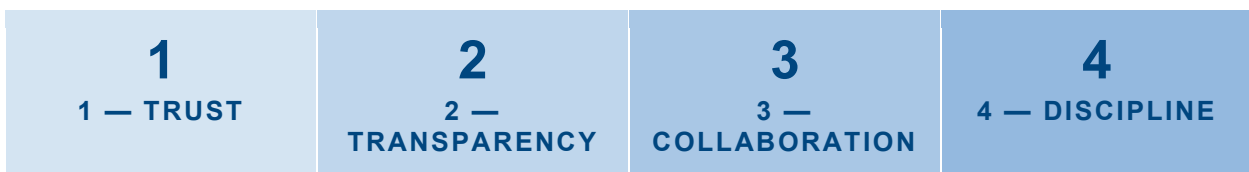
R³ Secure FacilityOPS™ is, in plain terms, the “one operating system” described in this article — a single governance model that runs across hard services, soft services, and specialty-trade coordination on a single data backbone. We use the FORCE framework — FLOW · OPTIMIZE · RELIABLE · CONTROL · EXECUTE — as the operational language that translates integration from a slide into daily site discipline.

The structural savings the buyer can expect from genuine integration — not from administrative consolidation — concentrate in six categories, reweighted in April 2026 as Process Waste (~22%), Labor (~21%), RM/PM Optimization (~18%), Asset Life (~15%), Energy Optimization (~14%), and Excess Cleared Costs (~10%). The reweighting elevates Lean discipline to the dominant savings driver and promotes asset-lifecycle intelligence and energy management from a residual category to two first-class drivers. These weights are how IH Services internally models the structural-savings target of 10–15% in Year 1; they should be pressure-tested against site baseline before they are written into a commercial proposal.

In R³ terms: Integration is what makes Reliability portable across a portfolio, what makes Responsiveness measurable on one dashboard, and what makes Reduction defensible to finance, procurement, and audit at the same time.

Procurement Language Aligned to Integrated O&M

The commercial language for integrated O&M should do four things in sequence.



Require transparent reporting and a shared evidence base (McKinsey)	Demand a common data model and a reporting environment leadership can use (GSA, IFMA)	Require joint governance: procurement, ops, finance, partner (McKinsey)	Structure services around required results and measurable standards (FAR)
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Figure 3.4: Four Commercial Disciplines for Integrated O&M. Integration without these four is administrative consolidation — not operational control.

The four disciplines are sequential because they build on each other. Trust without transparency is sentiment. Transparency without collaboration produces visibility no one acts on. Collaboration without commercial discipline produces meetings without outcomes. Discipline without trust pushes risk to dispute resolution. Buyers that hold all four in their solicitation language end up with contracts that perform after award; buyers that drop any one of them typically discover the gap inside the first twelve months.

Frequently Asked Questions

What does “one operating system” mean in facility management?

It means one governance framework, one set of measurable outcomes, one data backbone, and one accountable service model across trades and sites. The goal is to reduce seams, improve visibility, and speed operational decision-making (Deloitte, GSA, IFMA).

Is integrated O&M always an outsourced model?

No. Integration describes how services are governed and coordinated, not only who employs the technicians. A client can integrate self-performed teams, outsourced teams, or both — as long as the operating model uses one performance language and one control structure (McKinsey, FAR).

Why do secure portfolios benefit more from integration?

Because secure environments have lower tolerance for misrouted work, unclear accountability, disconnected data, or slow cross-trade escalation. Federal and defense case evidence shows that fragmented visibility can weaken both oversight and mission support (GAO, GSA).

What should buyers validate before awarding an integrated O&M contract?

Buyers should validate the KPI set, data rights, dashboard logic, escalation pathways, site-specific asset assumptions, savings-validation approach, and governance cadence. Integration without those elements often creates administrative consolidation without operational control (McKinsey, CBRE, FAR).

Sources

MCKINSEY

Six emerging trends in facilities management sourcing · Taking supplier collaboration to the next level.

DELOITTE

Shaping Tomorrow: Trends influencing the Corporate Real Estate and Facilities Management Industry in 2025.

GSA

Enterprise Shared Services for Federal Agencies (USSM).

IFMA

FMJ: Making Data Work · FMJ: Using KPIs to Drive Results.

CBRE

Accelerating Technological Innovation: A Catalyst for Facilities Management Transformation · The Self-Optimizing Portfolio.

U.S. GAO

DOD Joint Bases (GAO-26-106832) · Red Hill (GAO-25-106572).

FAR

FAR 37.601 General · FAR 37.602 Performance Work Statement.

Appendix A. Open Questions, Limitations, and Consolidated Sources

A.1 Open Questions and Limitations

Several documented case examples in this report are intentionally anonymized by the source organizations. Where company name, geography, site count, or budget is not disclosed by the publisher, we have labeled those details as unspecified rather than extrapolating them.

Some maintenance-performance ranges, especially around predictive maintenance, come from authoritative but mixed evidence bases that combine government guidance, industry field experience, and real-world case data. They should be used as directional planning ranges rather than guaranteed outcomes for any specific site.

CBRE technology-performance figures are vendor-reported and explicitly vary by portfolio, geography, and partnership model. They are useful for illustrating what integrated digital FM can enable, but they are not neutral market averages.

The IH Services structural-savings weights presented in Article 3's perspective overlay are provider-derived from the R³ Secure FacilityOPS™ savings model and should be pressure-tested against site baseline data before being incorporated into a commercial proposal. They are not third-party benchmarks.

Where the evidence is directional, we have said so. Where the perspective is provider opinion, we have marked it. This report is offered as a decision aid, not a benchmarking report.

A.2 Consolidated Source List

All quantified claims in this report are traceable to one of the following public sources. URLs are provided as published by the source organizations at the time of compilation.

McKinsey & Company

Six emerging trends in facilities management sourcing — mckinsey.com/capabilities/operations/our-insights/six-emerging-trends-in-facilities-management-sourcing

Rethinking the balance in outsourcing indirect procurement — mckinsey.com/capabilities/operations/our-insights/indirect-procurement-insource-outsource-or-both

Taking supplier collaboration to the next level — mckinsey.com/capabilities/operations/our-insights/taking-supplier-collaboration-to-the-next-level

Digitally enabled reliability: Beyond predictive maintenance — mckinsey.com

The future of maintenance for distributed fixed assets — mckinsey.com

U.S. Government Accountability Office (GAO)

F-35 Aircraft: DOD and the Military Services Need to Reassess the Future Sustainment Strategy (GAO-23-105341) — gao.gov/products/gao-23-105341

Red Hill Fuel Storage: DOD's Contract Approaches and Oversight before and after the 2021 Fuel Leaks (GAO-25-106572) — gao.gov/products/gao-25-106572

Federal Real Property: Disposing of Unneeded Facilities Could Help Reduce Maintenance Backlog (GAO-25-108400) — gao.gov/products/gao-25-108400

DOD Real Property: Actions Needed to Improve Oversight of Underutilized and Excess Facilities (GAO-25-106132) — gao.gov/products/gao-25-106132

DOD Joint Bases: Actions Needed to Improve Sustainment of Facilities (GAO-26-106832) — gao.gov/assets/gao-26-106832.pdf

U.S. Department of Energy (DOE)

Operations & Maintenance Best Practices Guide: Release 3.0 — energy.gov/sites/prod/files/2020/04/f74/omguide_complete_w-ao-disclaimer.pdf

IFMA (International Facility Management Association)

Europe Operations and Maintenance Benchmarks White Paper Series #3 — knowledgelibrary.ifma.org

FMJ: Making Data Work — fmj.ifma.org/making-data-work

FMJ: Using KPIs to Drive Results — fmj.ifma.org/using-kpis-to-drive-results

CBRE

Facilities Management Procurement Perspectives: Risk, Economic Stability and Inflation — cbre.com

Accelerating Technological Innovation: A Catalyst for Facilities Management Transformation — cbre.com

The Self-Optimizing Portfolio: Building Intelligence that Transforms FM Operations — cbre.com

Deloitte

Asset Optimization: Predictive Maintenance — deloitte.com

Shaping Tomorrow: Trends influencing the Corporate Real Estate and Facilities Management Industry in 2025 — deloitte.com

U.S. General Services Administration (GSA)

Enterprise Shared Services for Federal Agencies (USSM) — ussm.gsa.gov

Federal Acquisition Regulation / DEAR

FAR 37.601 General — [acquisition.gov/far/37.601](https://www.acquisition.gov/far/37.601)

FAR 37.602 Performance Work Statement — [acquisition.gov/far/37.602](https://www.acquisition.gov/far/37.602)

DEAR 970.1100-1 Performance-Based Contracting — [acquisition.gov/dears/970.1100-1-performance-based-contracting](https://www.acquisition.gov/dears/970.1100-1-performance-based-contracting)

Appendix B. About IH Services

Who We Are

IH Services is a self-performing integrated O&M provider for secure facilities. Founded in 1955, we are part of the GDI Ainsworth family of companies and operate independently as a U.S. workforce. We hold an active CAGE code, are registered in SAM.gov, and operate a DoD security-cleared workforce. Our defense-focused division operates as IHDefense.

What We Do

We deliver integrated O&M — Hard Services, Soft Services, and Specialty Trade Coordination — in environments where uptime, compliance, and cleared access carry real consequences. Our model is self-performance from the bottom up: roughly 90 cents of every client dollar reaches a worker rather than a layer of overhead. The model is governed by R³ Secure FacilityOPS™ — Reliability, Responsiveness, Reduction — and operated through the FORCE framework: FLOW · OPTIMIZE · RELIABLE · CONTROL · EXECUTE.

RELIABILITY Systems, policies, and evidence that stay in place	RESPONSIVENESS On-demand answers to clients, auditors, and regulators	REDUCTION Waste, risk, and cost eliminated through disciplined ops
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Figure B.1: R³ Secure FacilityOPS™ — Reliability, Responsiveness, Reduction. The three reader-facing outcomes IH Services drives at every site.

What We Bring to a Secure Portfolio

SELF-PERFORMED Cleared, trained, retained workforce — not a brokered labor stack.	LEAN Full Lean toolkit: 5S, SOP Playbooks, Gemba, RCA, VSM, DPMO, 8-Waste, Kaizen.	INTEGRATED One operating system, one data backbone, one governance cadence.
AUDIT-READY Documentation discipline matched to DCSA, OSHA, CMMC 2.0, and client SLA evidence.	BACKED Independent operations inside the GDI Ainsworth family — financial depth without overhead drag.	FOUNDED 1955 Seventy years of facility services discipline — recently re-purposed for the defense-industrial base.

Figure B.2: What IH Services Brings. Six attributes that distinguish our delivery model in secure portfolios.

How We Operate

FORCE is the daily operating language of R³. It translates strategic outcomes into the disciplines field teams use to run the work.

FLOW Capture & intake discipline	OPTIMIZE Continuous-improvement engine	RELIABLE Predictable operating cadence	CONTROL Named owners & evidence lanes	EXECUTE Deliver and inspect the work
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Figure B.3: FORCE — FLOW · OPTIMIZE · RELIABLE · CONTROL · EXECUTE. The five-pillar service-level management framework.

Where the Savings Come From

Our six-category structural-savings model is how IH Services targets 10–15% structural savings in Year 1 — and how that target compounds as R³ data matures. The model was reweighted in April 2026 to make Process Waste the dominant Lean-driven savings driver and to elevate asset-lifecycle intelligence and energy management to first-class categories. The weights are how we plan; site baselines are how we commit.

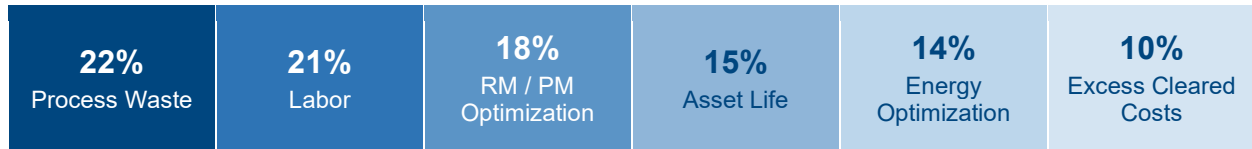


Figure B.4: R³ FacilityOPS™ Structural Savings Model (v2, April 2026). Six categories ordered by weight: Process Waste 22%, Labor 21%, RM/PM Optimization 18%, Asset Life 15%, Energy Optimization 14%, Excess Cleared Costs 10%. Weights are planning assumptions; client-specific values are confirmed during baseline.

How to Engage Us

If your portfolio is secure, mission-critical, or audit-exposed — and you have read enough thought leadership for one quarter — we would rather show you the model in your facility than explain it again on paper.

Three Ways to Start

A. EVIDENCE WALK

- A two-hour working session at your site
- We map your current cost, reliability, and compliance posture against the article evidence
- Output: a one-page assessment, no commitment
- Best for: ops directors, plant managers

B. SOURCING WORKSHOP

- A half-day procurement workshop
- We translate the FAR-aligned discipline in Articles 1 and 3 into your active solicitation language
- Output: a buyer's discipline checklist for your next FM RFP
- Best for: procurement, CFO, contracts

C. R³ PILOT PROPOSAL

- A 60–90 day pilot on one critical scope
- Targets a measurable outcome — PM compliance, escort avoidance, repeat-failure rate
- Output: a contractually defensible savings position, validated jointly
- Best for: defense site commanders, transformation sponsors

IH Services

Ready • Secure • Lean

Marc Collings • SVP, North America IFS Client Solutions

www.ihservices.com • CAGE code on file • SAM.gov registered

Where Facility Excellence Meets Defense Standards.

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