

• MBE STANDARDS · AUGUST 2026

The MBE Moment Has Arrived.

MBE 1-2022

QIF/STEP

Y14 MBD

NIST

DoD

Model-Based Enterprise standards are no longer optional —
they're becoming the **operating system of modern manufacturing.**

What Is ASME MBE?

ASME's Model-Based Enterprise Standards Committee governs how digital, model-based data is **created, shared, and reused** across entire product lifecycles — setting the rules for how modern manufacturing communicates.



01 · PUBLISHED STANDARD

MBE 1-2022 Framework

The foundational enterprise standard — establishing the governing architecture for model-based data across the product lifecycle.



02 · DUAL INTERPRETABILITY

Machine-Actionable Standards

Interpretable by both humans *and* software — enabling automated conformance checking and audit-ready compliance.



03 · JOINT COMMITTEE

Y14/MBE Joint Committee

Aligns drawing, dimensioning, and tolerancing (GD&T) with model-based definition — bridging legacy drafting with digital-first workflows.



04 · ECOSYSTEM PARTNERS

NIST, MxD & OEM Partners

Works in concert with NIST, MxD, and major OEM partners to shape interoperability requirements across defense and commercial aerospace.



2026 Is the Inflection Point.

1st



Published MBE Framework Standard — MBE 1-2022 sets the foundational enterprise baseline

● FOUNDATION

2026



MBE QIF Summit, Chicago — momentum building toward mandatory harmonization across the industry

● NOW

QIF + STEP + Y14



Three standards converging into one unified interoperability requirement for the entire digital thread

● CONVERGENCE

\$0



Cost of engaging now — versus the qualification risk, program loss, and rework cost of waiting until it's mandated

● OPPORTUNITY

Why Right Now? August 2026



Machine-Actionable Standards

ASME is turning standards into **code** — automatable, auditable, and machine-interpretable across the enterprise.



Supply Chain Crunch

OEMs are beginning to **formalize QIF/STEP/MBD** data delivery requirements for all suppliers — alignment is becoming a prerequisite.



Digital Thread Link

MBE frameworks are the **connective tissue** tying design → manufacturing → inspection into one traceable, unbroken data stream.



Federal Signals

NIST, DoD, and major OEMs are actively shaping procurement requirements right now — the compliance window is already closing.

Three Months From Now — What Changes.

AUGUST 2026 → Q4

SEPTEMBER

2026



⚠️ STANDARDS COMMENT WINDOW OPENS

Working group drafts of machine-actionable MBE standards released for public comment.

Miss this window, miss your chance to influence the output. Organizations that engage now shape the final spec — those that don't are left to comply with someone else's decisions.

OCTOBER

2026



⚠️ OEM SUPPLIER QUALIFICATION CYCLES

OEM supplier qualification cycles begin embedding MBE data delivery requirements.

Unprepared suppliers face direct program risk. QIF/STEP/MBD delivery alignment is moving from "preferred" to "required" — disqualification risk rises for every cycle you enter without compliance in place.

NOVEMBER

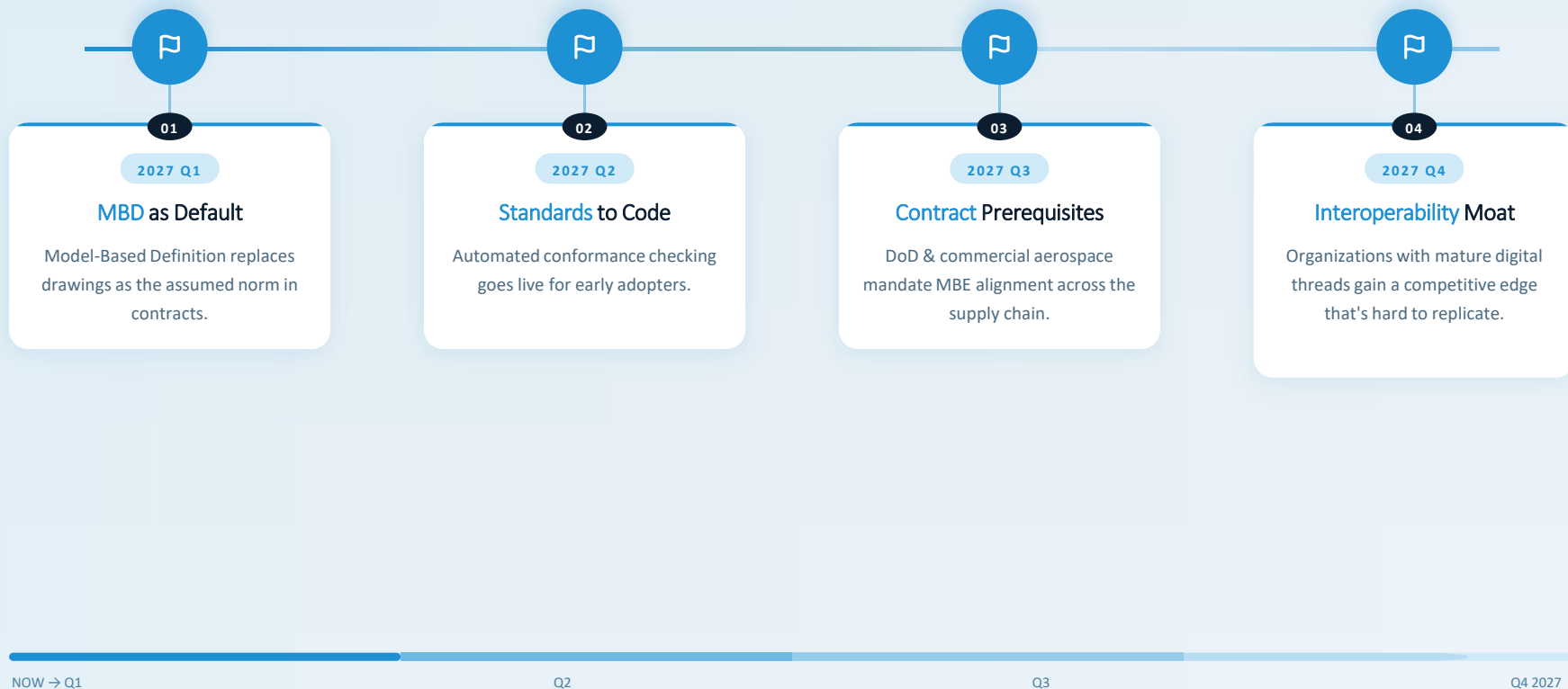
2026



⚠️ Q4 PLANNING LOCKS 2027 BASELINES

Q4 planning locks 2027 program baselines across enterprise and supply chain.

MBE readiness must be in the plan NOW. Programs budgeted and scoped without MBE alignment built in will spend all of 2027 reacting — at cost and schedule penalties that compound quickly.



Four Risks You **Can't Ignore.**



RISK 01

Supply Chain Exposure

Suppliers not aligned to QIF/STEP/MBD face **OEM disqualification risk** — with no warning until the contract is already gone.



RISK 02

IP Leakage

Model-based files embed design intent, tolerances, and process parameters — **most companies have zero governance** over how they flow downstream.



RISK 03

Standards Drift

MBE/Y14 standards are **actively evolving right now**. Organizations not tracking changes will be caught off guard when requirements shift.



RISK 04

Compliance Blind Spots

No visibility into which processes, formats, or partners fall outside MBE compliance — **until a contract flags it**. By then, the damage is done.

— THOUGHT LEADERSHIP —

“

“MBE adoption isn’t just a **technical challenge**.
It’s a *risk intelligence challenge*.”

— RiskGraphs, *Decision Intelligence for Digital Manufacturing*

RiskGraphs is an **AI-powered platform** that gives manufacturing and defense organizations continuous visibility into their **MBE, supply chain, cyber, and IP risks**.



RISKGRAPHS

DECISION INTELLIGENCE PLATFORM

How RiskGraphs Helps

AI-powered decision intelligence across your enterprise, supply chain, and risk posture



Supply Chain Risk Mapping

Graph-based dependency maps show which suppliers are MBE-ready and where interoperability gaps create delivery risk — visualized in real time across your entire supply network.



AI Risk Models

Continuously track your alignment to MBE/Y14 standards. Compliance becomes a live signal, not an annual audit — with AI models that evolve as standards evolve.



Cyber & IP Governance

Monitor how model-based IP flows through your digital thread and supply chain. Govern exposure before it becomes a breach — with full visibility into data movement and access patterns.



Knowledge Graph Backbone

Map standards obligations, data flows, supplier relationships, and risk events in one connected intelligence surface — giving your organization a living, queryable model of enterprise risk.

Don't Let MBE Compliance Catch You Off Guard.

RiskGraphs gives you the AI-powered intelligence to navigate ASME MBE adoption — across your enterprise, your supply chain, and your risk posture.



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• Schedule a Decision Intelligence Platform demo today •