



D-POAF®

Decentralized Proof-Oriented AI Framework

Practical Guide for Teams

Understand D-POAF in 15 minutes.

Implement it in your first Wave today.

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How to Use This Kit

This kit contains 5 documents. Together they give you everything you need to understand D-POAF® and implement it immediately, no additional tools or training required.

#	Document	What it does	When to use it
1	DPOAF_Practical_Guide.pdf (this document)	Explains the full framework: concepts, roles, lifecycle, proofs, governance, and implementation steps.	Read first. Takes ~15 minutes.
2	DPOAF_Dynamic_Laws_Starter.pdf	15 ready-to-use governance rules for your team. Includes an amendment log and team sign-off.	Before Wave 1 starts. Adopt as your governance baseline.
3	DPOAF_Wave_Scope_Template.pdf	Fillable template to define objectives, team, scope, success criteria, and sign-off for each Wave.	At the start of every Wave.
4	DPOAF_PromptRegister.pdf	Log every Prompt Action: model, context, output, quality rating, reusability.	From Phase 3 onwards, throughout the Wave.
5	DPOAF_Proof_Record_Template.pdf	Fillable template to record PoD, PoV, and PoR evidence. Includes lessons learned and sign-off.	At Wave close, before marking it complete.

Minimum viable start: You can run your first Wave with just documents 2, 3, and 5. Add the PromptRegister from your first prompt onwards. The guide is your reference, you do not need to re-read it for every Wave.

No special software required: All templates are standard Pdf and Excel files. No proprietary tooling needed. D-POAF is designed to work with the tools your team already uses.

1. What Is D-POAF?

The Core Problem: 92% of developers now use AI coding tools daily (GitHub Octoverse, 2024). But when something goes wrong in production, teams often cannot answer: who decided this? Which prompt produced it? Was it aligned with the original business requirement?

D-POAF® (Decentralized Proof-Oriented AI Framework) is an open-source governance framework designed to make AI-enabled software delivery structured, traceable, and provable, by design, not as an afterthought.

D-POAF does not replace your existing tools (Git, Jira, CI/CD). It adds a governance layer on top: a structured unit of work called a **Wave** that captures AI context, human decisions, and structured evidence across every phase of delivery.

Three Founding Principles

- **Proof over assumption.** No AI contribution without traceability.
- **Roles over ad-hoc.** Accountability is a structural property of delivery, not a documentation exercise.
- **Living Governance.** Governance evolves with the team, no single authority owns the rules.

Published: D-POAF® was published in 2025 on CERN's Zenodo infrastructure with citable DOIs. It predates the January 2026 wave of AI Software Engineering standards, one of the first governance frameworks specifically designed for AI-native software delivery.

The D-POAF Big Picture

The diagram below shows how all D-POAF elements connect: the 4 high-level phases, the 6 roles, the cross-cutting assets (PromptRegister, FeedbackRegister, Dynamic Laws), the Proof Model, and the Framework Outcomes, all organized around the Continuous Wave Loop.

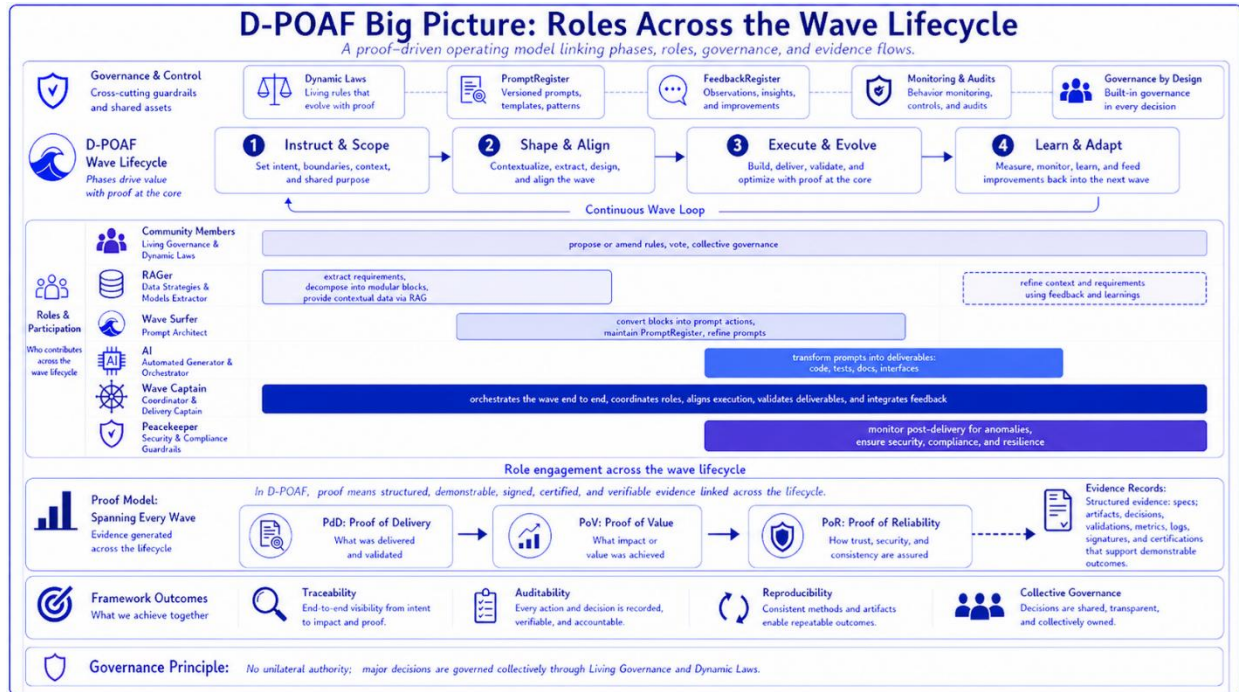


Figure 1 - D-POAF Big Picture: Roles Across the Wave Lifecycle

2. The Wave - Core Delivery Unit

Everything in D-POAF is organized around a

Wave: a governed container for a unit of AI-enabled work. Think of a Wave as a smart sprint, one that not only tracks what was done, but why it was done, how the AI contributed, and what proof exists that it worked.

A Wave is not a ticket, not a sprint, and not a project. It is a self-contained unit of work that structures AI contributions across six dimensions.

The 6 Dimensions of a Wave

Every Wave is structured around six dimensions. Together they ensure that AI-generated work is never anonymous, never untraceable, and always provable.

Dimension	What it governs inside the Wave
Scope	Defines objectives, boundaries, and the business requirement chain for the Wave.
Piloting	Records early AI experiments, tool evaluations, and prompt context decisions before implementation.
AI Context	Maintains the register of prompts, model versions, context snapshots, and AI reasoning.
Execution	Tracks implementation activity including AI-generated contributions and human decisions.
Proofs	Produces structured evidence: Proof of Delivery (PoD), Proof of Value (PoV), Proof of Reliability (PoR).
Traceability	Documents the auditable chain from business requirement to deployed outcome.

Practical tip: You do not need to fill all 6 dimensions perfectly on your first Wave. Start with Scope, AI Context, and Proofs. Add the others as your team gets comfortable with the framework.

3. The 6 Roles

D-POAF defines six formal roles. Each role has a specific accountability within the Wave. Roles can be combined: one person can play multiple roles, especially in small teams. What matters is that the responsibility is explicitly assigned, not assumed.

Role	Also Known As	Core Responsibility
RAGer	Data Strategist & Module Extractor	Extracts requirements from documents, decomposes into structured modules and feature blocks, feeds RAG context. Active from sub-phase 1-2.
Wave Surfer	Prompt Architect	Converts feature blocks into Prompt Actions, maintains PromptRegister, refines prompts. Active sub-phases 2-3.
AI	Automated Generator & Optimizer	Transforms prompt actions into code, tests, docs, and interfaces. Active sub-phases 4-5.
Wave Captain	Coordinator of Delivery Cycles	Orchestrates the full wave end-to-end: roles, execution, validation, integration, feedback. Active all sub-phases.
Community Members	Living Governance & Dynamic Laws	Propose/amend rules, vote, ensure collective governance. Active throughout.
Peacekeepers	Security & Compliance Guardians	Monitor post-delivery for anomalies, ensure security, compliance, resilience. Active sub-phases 5-7.

Who Is Indispensable?

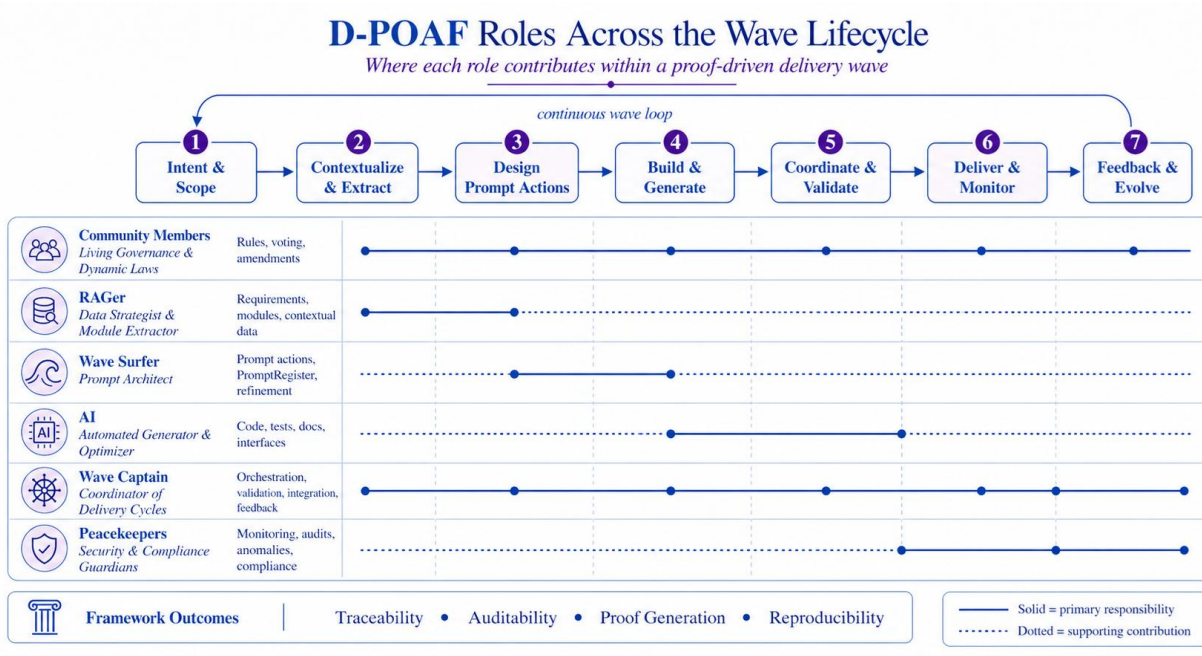
For your first Wave, you need at minimum three active roles:

- The Wave Captain to start, orchestrate, and validate the Wave.
- The RAGer to structure the AI context so prompts are grounded in real requirements.
- The Wave Surfer to convert requirements into structured Prompt Actions and maintain traceability.

Note: The AI role is not a human, it is the AI tool itself (Copilot, Claude, ChatGPT, etc.) that generates deliverables from the Prompt Actions created by the Wave Surfer.

Roles Across the Wave Lifecycle

The diagram below maps each role's contribution across the 7 sub-phases. A solid line indicates primary responsibility, a dotted line indicates a supporting contribution. The Wave Captain is the only role active across all 7 sub-phases.



No unilateral authority: major decisions are governed collectively through Living Governance and Dynamic Laws.

Figure 2 - D-POAF Roles Across the Wave Lifecycle (solid line = primary responsibility, dotted = supporting contribution)

4. The Wave Lifecycle - 7 Sub-Phases

Every Wave follows a lifecycle of 7 sub-phases, organized around a

Continuous Wave Loop: after sub-phase 7, insights feed back into the next Wave, making each cycle smarter than the last.

#	Phase	Sub-Phase	What Happens
1	Instruct & Scope	Intent & Scope	Define objectives, boundaries, shared purpose. The Wave Captain initializes the wave container.
2	Shape & Align	Contextualize & Extract	RAGer extracts requirements from documents and structures them into modular blocks via RAG.
3		Design Prompt Actions	Wave Surfer converts modules into Prompt Actions and populates the PromptRegister.
4	Execute & Evolve	Build & Generate	AI transforms prompt actions into deliverables: code, tests, docs, interfaces.
5		Coordinate & Validate	Wave Captain validates outputs, aligns with intent. AI optimizes. Peacekeepers check compliance.
6		Deliver & Monitor	Deliverables shipped. Peacekeepers monitor for anomalies. Evidence records generated (PoD, PoV, PoR).
7	Learn & Adapt	Feedback & Evolve	RAGer refines context. Wave Surfer updates prompts. Community Members propose governance changes.

The Continuous Wave Loop

D-POAF is not linear, it is iterative. After Feedback & Evolve (sub-phase 7), the learnings flow back into the next Wave's Intent & Scope (sub-phase 1). Over time, your PromptRegister improves, your RAG context becomes richer, and your delivery cycles become faster and more reliable.

Key asset: The PromptRegister is your team's institutional memory for AI-enabled delivery. Every prompt that produced a good outcome is stored, versioned, and reusable. Every prompt that failed teaches the next Wave to avoid it.

5. The 5 Wave Profiles

Not all Waves are about building software. D-POAF defines five Wave Profiles, types of Waves for different kinds of organizational work. Choose the profile that fits your initiative before you start.

Wave Profile	Purpose	Primary Roles
Deliver Wave	Create solutions and tangible artifacts (code, features, docs)	RAGer, Wave Surfer, AI, Wave Captain
Decide Wave	Portfolio-level decisions and strategic trade-offs	Wave Captain, Community Members
Control Wave	Governing policies and quality gates for processes	Peacekeepers, Community Members, Wave Captain
Delegate Wave	Define boundaries and scope of autonomy for teams	Wave Captain, Community Members
Operate Wave	Ongoing reliability of systems and managing operational drift	Peacekeepers, AI, Wave Captain

Most teams start with a Deliver Wave, building a feature, fixing a bug, generating a module. Once the framework is established, Decide Waves and Control Waves help teams govern their AI delivery portfolio at a higher level.

6. The Proof Model

The “Proof” in D-POAF is not documentation. It is

structured, demonstrable, verifiable evidence that links every deliverable back to its intent and forward to its impact. Proofs are generated across every Wave and accumulated as Evidence Records.

Code	Name	Answers	Evidence Includes
PoD	Proof of Delivery	The work was completed and validated	Specs, test results, signed artifacts
PoV	Proof of Value	The work achieved its intended impact	Metrics, KPIs, business outcome records
PoR	Proof of Reliability	Trust, security, and consistency are assured	Audit logs, compliance certificates, anomaly reports

Evidence Records

Every Wave produces Evidence Records, a collection of structured artifacts that support its proofs. These can include:

- Specifications and acceptance criteria
- Test results and validation logs
- Decision logs and AI reasoning captures
- Performance metrics and business outcome data
- Compliance certificates and security audit results
- Signed delivery artifacts

Why this matters: When an auditor asks, “Show me the chain from this business requirement to this deployed feature”, your Evidence Records answer that question. Without D-POAF, most teams cannot answer it.

7. Governance - Living Rules, Not Fixed Policies

Governance Principle: No unilateral authority. Major decisions are governed collectively through Living Governance and Dynamic Laws.

D-POAF governance is designed to evolve with your team and your AI tooling. It is built on two core mechanisms:


Dynamic Laws

Dynamic Laws are the living rules of your D-POAF environment. They define how Waves are structured, how AI tools are used, how proofs are generated, and how conflicts are resolved. Unlike static policies, Dynamic Laws can be proposed and amended by any team member, and they are updated with proof, not just opinion.

Living Governance

Living Governance is the process by which Dynamic Laws evolve. Community Members propose amendments. The team votes. The Peacekeepers ensure the changes are consistent with security and compliance requirements. No single role, not even the Wave Captain, can change the rules unilaterally.

In practice for small teams: Start with a simple set of rules (your first Dynamic Laws) documented in a shared file. As your team learns what works, update them together. The goal is that governance improves through experience, not through top-down mandates.

 **Template available:** The D-POAF Dynamic Laws Starter Pack (DPOAF_Dynamic_Laws_Starter.pdf) gives you 15 ready-to-use rules across 5 categories, AI tool usage, prompt management, roles & accountability, proof & validation, and governance process. Adapt and adopt on day one.

8. Getting Started - Your First Wave

The fastest way to adopt D-POAF is to run one real Wave on one real initiative. Do not try to implement the full framework at once. Start small, learn, and expand.

Your Implementation Kit

This guide comes with 4 ready-to-use templates. Use them in this order:

1. **DPOAF_Dynamic_Laws_Starter.pdf**: Before your first Wave. Adopt your governance baseline. Have your team sign it.
2. **DPOAF_Wave_Scope_Template.pdf**: At Wave start. Define objectives, team, scope, success criteria, and milestones.
3. **DPOAF_PromptRegister.pdf**: Throughout the Wave. Log every Prompt Action from phase 3 onwards.
4. **DPOAF_Proof_Record_Template.pdf**: At Wave close. Record PoD, PoV, PoR evidence and get sign-off.

	Action	How
Step 1	Identify your first Wave	Pick one concrete delivery initiative (feature, module, fix). Keep it small for the first wave.
Step 2	Assign the roles	Designate a Wave Captain, a RAGer, and a Wave Surfer. They can be the same person at first.
Step 3	Define Scope	Write down: what are we delivering? For which business requirement? What are the success criteria?
Step 4	RAGer works	RAGer extracts requirements from available docs and structures them into functional modules, feature blocks and configure AI Context.
Step 5	Wave Surfer works	Wave Surfer converts feature blocks into Prompt Actions and enters them into the PromptRegister.
Step 6	AI generates	AI tools generate the deliverables based on the Prompt Actions and Context. All prompts and outputs are logged.
Step 7	Validate & prove	Wave Captain validates outputs against the original scope. Generate PoD, PoV evidence.
Step 8	Deliver & monitor	Ship the deliverable. Peacekeepers (if assigned) monitor for anomalies. Record PoR if needed.
Step 9	Learn loop	Capture what worked, what didn't. Update PromptRegister. Feed insights into next Wave.

Minimum Viable D-POAF

For your very first Wave, you need only three documents:

5. **Wave Scope:** A Wave Scope document (1 page): What are we building? For which requirement? What does success look like?
6. **PromptRegister:** A PromptRegister (a simple table): Prompt ID | Prompt text | Model used | Output summary | Quality rating.
7. **Proof Record:** A Proof record (1 page): What was delivered? What evidence do we have? Who validated it?

Tooling note: D-POAF is tool-agnostic. You can run your first Wave with nothing more than a shared document folder, a spreadsheet for the PromptRegister, and your existing AI coding tool. No special software required to start.

9. Quick Reference Glossary

Term	Definition
Wave	The core delivery unit in D-POAF. A governed container that structures all AI-enabled work across 6 dimensions.
Wave Lifecycle	The lifecycle spans of 4 phases, broken down into 7 operational sub-phases, from Intent & Scope to Feedback & Evolve
Wave Profile	The type of Wave: Deliver, Decide, Control, Delegate, or Operate.
PromptRegister	The versioned log of all prompts, templates, and patterns used in a Wave.
FeedbackRegister	The log of observations, insights, and improvements captured after delivery.
PoD	Proof of Delivery, structured evidence that the work was completed and validated.
PoV	Proof of Value, evidence that the work achieved its intended business impact.
PoR	Proof of Reliability, evidence that trust, security, and consistency are assured.
Dynamic Laws	Living rules that evolve with proof. Governed collectively, not by any single person.
RAG	Retrieval-Augmented Generation, the technique RAGer uses to ground AI context in structured documents.
Prompt Action	A structured action directive, versioned prompt created by the Wave Surfer from a functional module.
Living Governance	The D-POAF principle that governance rules evolve continuously through collective decision-making.

Resources & Official Publications

Framework website: d-poaf.org

Practitioner's Guide: [Zenodo](#)

Canonical Specification: [Zenodo](#)

Terminology Reference: [Zenodo](#)

LinkedIn community: [LinkedIn](#)

Discord community: [Discord](#)

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