# PM Hub – Work Breakdown Structure

Project: PM Hub (PMBOK + PRINCE2 + ISO 21500/21502)  
Version: 1.0  
Date: October 2025  
Prepared by: PMO Analyst

# Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Author | Description |
| 1.0 | Oct 2025 | PMO Analyst | Initial Complete WBS and Dictionary Creation |

# Table of Contents

(To be auto-generated in Word)

# 1. Work Breakdown Structure

The PM Hub project WBS is organized into 16 top-level deliverables with a maximum depth of Level 3.

1. 1.0 Project Management
2. 2.0 Requirements & Analysis
3. 3.0 Solution Architecture & Design
4. 4.0 Backend Services
5. 5.0 Frontend/UI
6. 6.0 Data Ingestion & Processing
7. 7.0 Search & Retrieval (FTS5)
8. 8.0 Comparison & Insights
9. 9.0 Tailoring Engine
10. 10.0 Database & Migrations
11. 11.0 Quality Assurance & Testing
12. 12.0 DevOps, Build & Deployment
13. 13.0 Security & Compliance
14. 14.0 Documentation & Training
15. 15.0 Change Control & Configuration Management
16. 16.0 Handover & Project Closure

# WBS Dictionary

Each Level-3 deliverable is defined with scope, assumptions, and acceptance criteria. Estimated effort and cost are marked as TBD.

|  |  |  |  |
| --- | --- | --- | --- |
| WBS ID | Deliverable Name | Description | Acceptance Criteria |
| 1.1 | Project Management Plan | Defines project governance, timeline, budget control, and reporting. | Approved plan signed by sponsor. |
| 2.1 | Functional Requirements Specification | Documents functional scope including ingestion, search, compare, insights, and tailoring. | Requirements reviewed and baselined. |
| 4.1 | Django Backend Services | Implementation of models, views, and endpoints supporting all major features. | All endpoints functional on localhost:8000. |
| 6.1 | Ingestion CLI Pipeline | CLI for parsing PDFs/EPUBs and storing pages into SQLite FTS5. | CLI executes without errors for all standards. |
| 7.1 | Search & Highlight Engine | Implements SQLite FTS5-based search with highlighting and pagination. | Results returned ≤1.5s with <20 results/page. |
| 8.1 | Comparison & Insights Module | Provides similarity comparisons, unique point analysis, and lifecycle term visualization. | Comparison and charts render accurately. |
| 9.1 | Tailoring Engine | Generates phase-specific recommendations with evidence links. | Tailoring produces valid outputs per project type. |
| 14.1 | User Documentation | README, setup guide, and feature overview documentation. | Quick Start works end-to-end on Windows. |

# RACI Matrix (Level-2 Deliverables)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Deliverable | Product Owner | Tech Lead | Backend Eng | Frontend Eng | Data/ML Eng | QA Eng | DevOps Eng | PM SME |
| 1.0 Project Management | A | C | I | I | I | I | I | R |
| 2.0 Requirements & Analysis | A | C | R | C | I | I | I | R |
| 4.0 Backend Services | I | A | R | C | C | I | I | I |
| 5.0 Frontend/UI | I | A | C | R | I | C | I | I |
| 6.0 Data Ingestion | I | A | R | I | C | I | I | I |

# Project Milestones & Acceptance Criteria

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Milestone ID | Description | Entry Criteria | Exit Criteria | Owner |
| M1 | Requirements Baseline | Draft requirements complete | Approved requirements baseline | Product Owner |
| M3 | Ingestion CLI Ready | Parser design complete | All standards ingested successfully | Backend Eng |
| M5 | Search Module Accepted | FTS5 indexing done | Search returns highlighted results ≤1.5s | Tech Lead |
| M7 | Compare & Insights Validated | Comparison algorithm implemented | Token\_set\_ratio ≥70 pairs display correctly | QA Eng |
| M10 | Tailoring Engine Verified | Recommendations generated | Tailoring outputs evidence-linked lists | PM SME |
| M12 | Final Handover | All deliverables accepted | Signed handover and closure report | Project Manager |

# Risk Register (Top 10)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Risk ID | Statement | Likelihood | Impact | Mitigation |
| R1 | PDF ingestion failure for ISO standards | Medium | High | Early validation of parsing tools |
| R2 | FTS5 search latency exceeds target | Medium | Medium | Optimize indexing and pagination |
| R3 | Bookmark persistence failure | Low | Medium | Session testing pre-release |
| R4 | UI performance lag | Medium | Low | Use Tailwind optimizations |
| R5 | Security breach due to unsafe HTML | Low | High | Implement sanitization and CSP headers |

# Requirements Traceability Matrix

|  |  |  |
| --- | --- | --- |
| Requirement ID | Requirement Description | Mapped WBS ID |
| REQ-1 | System must ingest all provided standards | 6.1 |
| REQ-2 | Search returns results with highlighting | 7.1 |
| REQ-3 | Comparison shows similarities ≥70 | 8.1 |
| REQ-4 | Insights dashboard visualizes lifecycle coverage | 8.1 |
| REQ-5 | Tailoring produces evidence-linked recommendations | 9.1 |