Project Metadata Structure Checklist for Technical Documentation

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Introduction

This checklist is designed to help project teams define a clear, consistent, and usable metadata structure for technical documentation. It is based on practical experience from energy and infrastructure projects where documentation needed to remain trustworthy from early design through handover to operations.

Use this checklist at the start of a project, or when restructuring an existing document management setup.

Document Management Setup Checklist

1. Clarify the Scope of the Project

- ☐ Is the project clearly defined (name, ID, boundaries)?
- ☐ Does the metadata model distinguish project documentation from operational documentation?
- ☐ Is it clear which documents are project-only and which will be handed over to operations?

Why this matters:
Many metadata structures fail because project and asset documentation get mixed too early.

2. Define the Core Metadata Model

- ☐ Have you defined a minimum required set of metadata fields?
- ☐ Are these fields understandable without explanation?
- ☐ Do they support finding, validating, and approving documents?
- ☐ Typical core fields: Project ID, Document Number, Title, Revision, Status, Discipline, Document Type.

Rule of thumb:
If every document cannot be described reliably using these fields, simplify.

3. Align Metadata with the Project Structure

- ☐ Does the metadata reflect how the project is organized (systems, areas, work packages)?
- ☐ Are lifecycle phases clearly distinguishable (design, construction, commissioning)?
- ☐ Can users filter documents by phase without browsing folders?

This avoids overloading folder structures and keeps metadata useful as the project evolves.

4. Define Controlled Values Early

- ☐ Are dropdown lists used instead of free text where possible?
- ☐ Are discipline names, document types, and statuses standardized?
- ☐ Is there a clear owner for maintaining controlled values?

Controlled values prevent fragmentation before it starts.

5. Design for Handover to Operations

- ☐ Can project metadata be mapped to operational metadata later?
- ☐ Are asset identifiers aligned with engineering or maintenance systems?
- ☐ Is it clear which metadata remains relevant after handover?

Common mistake:
Designing metadata only for the project phase and ignoring long-term use.

6. Assign Ownership and Governance

- ☐ Is it clear who defines the metadata structure?
- ☐ Is it clear who maintains it during the project?
- ☐ Is metadata reviewed as part of document approval workflows?

Metadata without ownership degrades quickly.

7. Validate the Structure with Real Documents

- ☐ Has the structure been tested using real project documents?
- ☐ Can different disciplines apply it consistently?
- ☐ Can a new team member understand it without guidance?

If not, iterate before scaling.

Final Sanity Check

☐ Does this metadata structure help users work — not just comply?

If yes, you're on the right path.

Conclusion

A good metadata structure is not about completeness or complexity, it is about clarity, consistency, and long-term usability. When metadata is designed with real project work in mind, it becomes a quiet enabler of trust, efficiency, and successful handover.

If this checklist helps your team avoid rework or confusion later in the project, then it has done its job.