PQD-FH

Progressive Quality Documentation & Final Handover Framework

PQD-FH 01

FINAL QUALITY DOSSIER (FQD) PROCEDURE

Progressive Quality Documentation Procedure for Construction, Inspection and Handover Records

Document type	Generic procedure / template
Revision	1.00
Status	Published
Issue date	13-Oct-2026
Applies to	Industrial construction, electrical, I&C, mechanical and multidisciplinary quality records
Framework	PQD-FH - Progressive Quality Documentation & Final Handover Framework
Prepared by	Arkadiusz Wójcik | AI-assisted editorial review

Generic applicability statement. *This document provides a generic framework. Applicable legal and regulatory requirements, contractual obligations, organizational policies and procedures, approved technical specifications, and other formally established requirements take precedence where they impose additional, more stringent, or different requirements.*

Purpose: To support the progressive preparation of complete, reliable and traceable quality documentation throughout project delivery, ensuring its suitability for handover and subsequent use in operation and maintenance.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

TABLE OF CONTENTS

REVISION CONTROL 4
DOCUMENT USE 4
1. PURPOSE AND SCOPE 4
2. RELATIONSHIP TO THE PQD-FH FRAMEWORK 5
3. PRINCIPLES OF APPLICATION AND PROGRESSIVE ASSURANCE 6
3.1 Progressive Assurance 6
3.2 Core Principles 6
3.3 Generic FQD Lifecycle 6
4. DEFINITIONS AND ABBREVIATIONS 7
5. ROLES, RESPONSIBILITIES AND PACKAGE OWNERSHIP 9
6. FQD PLANNING AND PACKAGE BREAKDOWN STRUCTURE 10
6.1 Package Planning 10
6.2 Minimum Package Definition 10
6.3 Package Boundary Control 10
7. FQD DELIVERABLES IDENTIFICATION AND REQUIREMENTS MATRIX 10
7.1 Basis of Required Records 10
7.2 FQD Deliverables Matrix 11
7.3 Link to ITP / ITPL 11
7.4 Look-Ahead Review 11
7.5 Document Classification and Project Code Mapping 11
8. PROGRESSIVE COMPILATION AND QUALITY RECORD GENERATION 12
8.1 Progressive Compilation 12
8.2 Record Generation at Source 12
8.3 Supply Chain Flow-Down 12
8.4 Record Quality 12
8.5 Evidence Across Lifecycle Stages 12
9. STANDARD FQD PACKAGE STRUCTURE 13
10. MATERIAL AND EQUIPMENT DOCUMENTATION 14
10.1 Material / Equipment Documentation Lifecycle 14
10.2 Material / Equipment Index 14
10.3 Risk-Proportionate Traceability 14
10.4 Typical Traceability Chains 14
11. INSPECTION, TEST AND CALIBRATION RECORDS 15
11.1 Inspection Records 15
11.2 Test Records 15
11.3 Calibration / Verification Records 15
11.4 Hold and Witness Points 15
11.5 Templates and Completed Records 16
12. TRACEABILITY AND RECORD INTEGRITY 16
12.1 Record Integrity Controls 16
12.2 Asset and System Identification 16

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

12.3 Document Register Metadata 16
13. NON-CONFORMITIES, DEVIATIONS AND OPEN POINTS 17
14. INTERFACE WITH RED LINE MARK-UP AND AS-BUILT DOCUMENTATION 17
14.1 Affected Documents and Change References 17
15. INTERFACE WITH SYSTEM COMPLETION AND COMMISSIONING 18
16. FQD PACKAGE READINESS REVIEW 18
16.1 Minimum Readiness Criteria 18
16.2 Readiness Status 18
17. SUBMISSION, REVIEW, COMMENT RESOLUTION AND ACCEPTANCE 19
17.1 Generic Workflow 19
17.2 Review Comments 19
17.3 Partial / Progressive Submissions 19
17.4 Acceptance and Package Close-Out 19
17.5 Changes After Acceptance 20
18. FQD STATUS CONTROL, REPORTING AND KPI 20
18.1 Recommended Status Categories 20
18.2 Typical Management Information 21
18.3 Example KPI 21
18.4 KPI Calculation and Control Rules 22
19. ELECTRONIC FQD DELIVERY, CDE/EDMS AND CONTROLLED BASELINE 23
19.1 Electronic Package Requirements 23
19.2 Hard Copy 23
19.3 Language 23
19.4 Software and Configuration Deliverables 23
20. RETENTION AND LONG-TERM RECORD PRESERVATION 23
21. REFERENCE FRAMEWORK AND GUIDANCE 24
APPENDICES AND EDITABLE TEMPLATES 26
APPENDIX A - PROJECT-SPECIFIC REQUIREMENTS SHEET 27
APPENDIX B - FQD PACKAGE BREAKDOWN STRUCTURE / PACKAGE REGISTER 28
APPENDIX C - FQD DELIVERABLES MATRIX 29
APPENDIX D.1 - UNIVERSAL FQD PACKAGE INDEX 30
APPENDIX D.2 - DOCUMENT REGISTER 31
APPENDIX D.3 - LINKED CLASSIFICATION AND SCOPE METADATA 32
APPENDIX D.4 - DOCUMENT CLASSIFICATION AND PROJECT MAPPING 33
APPENDIX E - MATERIAL / EQUIPMENT TRACEABILITY REGISTER 34
APPENDIX F - FQD COMPLETION STATUS REGISTER 35
APPENDIX G - FQD PACKAGE READINESS CHECKLIST 36
APPENDIX H - RECOMMENDED FQD PACKAGE STATUS CODES 37
APPENDIX I - EXAMPLE RESPONSIBILITY MATRIX 38

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

REVISION CONTROL

Rev.	Date	Prepared by	Status	Revision description
1.00	13/10/2026	Arkadiusz Wójcik | AI-assisted editorial review	Published	First public issue.

DOCUMENT USE

Purpose. Provide a reusable framework for planning, preparing, compiling, controlling, reviewing, accepting and handing over Final Quality Dossiers for industrial projects, based on quality documentation and records generated throughout the project lifecycle.

Adaptation rule. Project-specific requirements, including document numbering, electronic systems, languages, retention periods, submission deadlines, approval routing, package status codes and required formats, shall be defined in Appendix A or in the applicable project-specific procedures.

Framework boundary. This procedure constitutes **PQD-FH 01**. It interfaces with, but does not replace, dedicated procedures governing Red Line Mark-Up / As-Built control, System Completion, Commissioning Records and Final Handover.

1. PURPOSE AND SCOPE

This procedure defines generic requirements for the planning, control, preparation, progressive compilation, review, acceptance and handover of the Final Quality Dossier (FQD).

The FQD is the controlled and traceable collection of quality documentation and records demonstrating that the defined scope of work has been executed, inspected, tested and accepted in accordance with applicable contractual, statutory, technical and project-specific quality requirements.

The procedure may be applied to industrial construction projects and adapted to individual disciplines, systems, subsystems, work packages, areas, equipment groups or other project breakdown structures. The required FQD content shall be derived from the approved scope of work, applicable ITP/ITPL, technical specifications, approved project procedures, quality requirements and completion or handover requirements.

Where a section, document or record type is not applicable to the defined scope, it may be designated as N/A, provided that the exclusion is justified, documented and accepted through the applicable project approval process.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

2. RELATIONSHIP TO THE PQD-FH FRAMEWORK

PQD-FH (Progressive Quality Documentation & Final Handover Framework) is the overarching framework within which this FQD Procedure operates. PQD-FH treats project quality documentation and records as a controlled information lifecycle developed progressively from defined requirements and execution evidence through verification, completion and final handover, supporting subsequent use in operation and maintenance.

The framework comprises the following interconnected control domains:

- **PQD-FH 01 – Final Quality Dossier (FQD):** planning, identification, collection, control, verification, progressive compilation, packaging and acceptance of quality documentation and records.
- **PQD-FH 02 – Inspection and Test Planning (ITP/ITPL):** development, project-specific adaptation, approval and revision control of inspection and test programmes (ITP) and detailed inspection and test plans (ITPL). This domain establishes acceptance criteria, responsibilities, intervention points and required quality records, ensuring traceability between applicable requirements, planned inspection and test activities, and evidence of conformity.
- **PQD-FH 03 – Red Line Mark-Up (RLM) / As-Built Control:** capture, control, verification and incorporation of field changes into final technical documentation, maintaining traceability between approved changes and the as-built condition.
- **PQD-FH 04 – System Completion and Commissioning Records:** control of readiness, completion, inspection, testing and commissioning evidence required to demonstrate system and subsystem completion and support decisions on progression to subsequent stages.
- **PQD-FH 05 – Final Handover:** controlled transfer and documented receipt of accepted documentation, structured information, completion evidence and associated records by the designated receiving organization, including identification of outstanding obligations, where applicable.
- **PQD-FH 06 – Lifecycle Data Management for Operational Analytics:** progressive collection, validation, structuring, preservation and controlled reuse of lifecycle data and engineering knowledge to support operation and maintenance, comparative analysis, reliability assessment and predictive maintenance. This domain defines information requirements with the receiving organization, preserves a traceable handover baseline and supports its subsequent use alongside operating, inspection, maintenance and failure data.

The numbering defines the presentation order of the framework modules rather than a strictly sequential workflow. Activities within the domains overlap and interact throughout project delivery. Documentation and operational data requirements are established early, while records are progressively generated, verified and compiled.

This FQD Procedure is intended for standalone application. The remaining framework modules are planned for progressive development and publication.

The interfaces, responsibilities and boundaries between these control domains shall be defined by the applicable project requirements and procedures. Where documents or records are maintained within another controlled dossier, register or information system, the FQD may contain an approved controlled reference to that source instead of duplicating the original record.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

3. PRINCIPLES OF APPLICATION AND PROGRESSIVE ASSURANCE

3.1 Progressive Assurance

Progressive assurance is the continuous confirmation of conformity through the generation, verification and controlled incorporation of quality documentation and records as the associated work is performed.

FQD preparation shall therefore begin with the planning of the relevant scope and required evidence and shall continue progressively throughout procurement, manufacturing, fabrication, construction, installation, inspection, testing and completion, as applicable.

3.2 Core Principles

- FQD shall contain objective evidence of conformity, not merely a collection of unrelated files.
- Required evidence shall be identified before, or at the appropriate stage of, execution and shall not be reconstructed retrospectively at project close-out.
- Every quality document and record shall be traceable to the relevant system, subsystem, equipment, material, cable, instrument, area, drawing, work package or other controlled identifier, as applicable.
- Approved ITP/ITPL, specifications, procedures and applicable project requirements shall define the minimum required inspection, testing and documentary evidence.
- Document and record status, revision, approval, authentication and controlled workflow evidence shall be maintained throughout the applicable lifecycle.
- Open NCRs, unresolved deviations and quality-related open points shall remain visible, traceable and controlled against the applicable completion and acceptance criteria.
- Applicable FQD requirements shall be flowed down through the supply chain to organizations responsible for generating, verifying or providing quality documentation and records.
- Project-specific document control requirements shall be applied without altering the generic assurance principles established by this procedure.

3.3 Generic FQD Lifecycle

The generic lifecycle is:

Requirements
Package Planning
Deliverables Definition
Execution
Inspection / Test
Quality Record
Verification
FQD Compilation
Readiness Review
Submission
Acceptance
Handover

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

4. DEFINITIONS AND ABBREVIATIONS

Term / Acronym	Definition
PQD-FH	Progressive Quality Documentation & Final Handover Framework. The overarching framework that integrates progressive quality evidence, FQD, red-line/as-built control, system completion, commissioning records and final handover.
FQD	Final Quality Dossier. A controlled collection of quality records demonstrating conformity of a completed scope with applicable requirements.
ITP	Inspection and Test Programme. A controlled higher-level document defining the scope, organization and overall sequence of inspection and testing for a project or defined work scope. It identifies the applicable detailed Inspection and Test Plans (ITPLs), their coverage and interfaces, providing a coordinated framework for inspection and test planning.
ITPL	Inspection and Test Plan. A controlled detailed plan for a defined activity, work package, system, equipment item or other specified scope. It identifies the required inspections and tests, their sequence, applicable reference documents, acceptance criteria, responsible parties, intervention points, including hold and witness points where applicable, and the quality records to be generated.
PBS	Package Breakdown Structure. The hierarchical breakdown used to define and control FQD packages and their relationship to the physical or functional project scope.
NCR	Non-Conformity Report documenting a condition or activity that does not comply with specified requirements.
RLM	Red-Line Mark-up. A controlled annotation or record capturing field changes or discrepancies for review, disposition and incorporation into final as-built documentation, including changes arising during installation, testing or commissioning where applicable.
N/A	Not Applicable. A controlled status used where a requirement does not apply to the defined scope and the exclusion is justified in accordance with project rules.
RFI	Request for Inspection: A formal request or record used to initiate, notify, document or confirm an inspection of a defined scope of work in accordance with the applicable ITP/ITPL, inspection requirements and project procedures. Where a project uses the abbreviation RFI to mean *Request for Information*, the applicable terminology and distinction shall be defined in Appendix A.
WAP	Work Activity Plan, where used by the project. A controlled planning document describing how a defined work activity will be executed, including applicable prerequisites, resources, methods, quality controls, interfaces and required records.
MCR	Material Compliance Record. A controlled record used, where adopted by the project, to demonstrate that a material or product has been reviewed and accepted against specified technical, contractual and statutory requirements.
CDE	Common Data Environment. The agreed information environment used to collect, manage and disseminate controlled project information.
CoC / DoC	Certificate of Conformity / Declaration of Conformity, where applicable, issued to demonstrate product conformity against stated requirements.
KKS	Kraftwerk-Kennzeichensystem, a power plant identification system. Where adopted by a project, KKS identifiers link the relevant plant scope to documentation and quality evidence. This procedure does not prescribe KKS coding rules.
QA/QC	Quality Assurance / Quality Control. Quality assurance focuses on providing confidence that quality requirements will be fulfilled. Quality control focuses on fulfilling those requirements through operational controls, inspection, testing and verification.
KPI	Key Performance Indicator. A measurable indicator used to evaluate progress or performance against a defined objective, such as FQD completion, review, acceptance or closure.
QMS	Quality Management System. A set of interrelated processes, responsibilities and resources used to establish quality policies and objectives, achieve those objectives and fulfil applicable quality requirements.
I&C	Instrumentation and Control. Systems, equipment and functions used to measure, monitor and control industrial processes.
EDMS	Electronic Document Management System. A controlled electronic system used for document registration, review, approval, distribution, revision control and archival.
MS	Method Statement. A controlled document describing how a defined work activity will be executed. It identifies the scope, prerequisites, work sequence, responsibilities, resources, equipment, applicable technical requirements and measures for controlling quality, health, safety and environmental risks. It references the applicable inspection and test plans and associated records, where required.
WOP	Works Organization Plan. A controlled document defining the organizational and logistical arrangements for a specified scope of work, including responsibilities, work sequencing, site layout, access, resources, coordination interfaces and applicable safety arrangements. It provides the organizational basis for execution and references detailed work methods and inspection or test plans, as applicable.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

Term / Acronym	Definition
STQ	Site Technical Query. A controlled request for clarification or resolution of a technical issue identified during site execution, including ambiguities, omissions or discrepancies in design documents, specifications or site conditions. The query, authorized response, affected documents and resulting actions shall remain traceable. Any resulting change shall follow the applicable project change-control and approval process.
DSR	Designer's Supervision Record. A controlled record documenting a technical query and the designer's clarification, assessment or proposed design solution during execution. It identifies the affected scope and documents, the designer's response and any required approvals or follow-up actions, maintaining traceability to the applicable design-change and as-built documentation processes.
FQD PACKAGE	A discrete, controlled set of quality records associated with a defined system, subsystem, area, discipline, work package, equipment group or other agreed scope.
PACKAGE OWNER	The person or function accountable for completeness and readiness of a defined FQD package within the execution organization.
PROGRESSIVE ASSURANCE	Continuous confirmation of conformity by generating, verifying and controlling quality records as the associated work is executed.
QUALITY RECORD	Documented evidence that an inspection, test, verification, review, approval, acceptance or other quality activity has been performed.
WITNESS POINT	A defined point at which a designated party is given the opportunity to witness an inspection or test in accordance with the applicable ITPL or project procedure.
TRACEABILITY	Ability to establish an unambiguous relationship between the physical installation or material and the relevant documents, certificates, inspections, tests and approvals.
DEVIATION / CONCESSION	A formally reviewed and approved departure from a specified requirement or acceptance of a nonconforming condition, as defined by the applicable project process.
OPEN POINT / PUNCH ITEM	An identified incomplete, defective or unresolved item requiring action before the applicable completion or acceptance milestone.
AS-BUILT DOCUMENTATION	Final controlled technical documentation reflecting the verified actual installed condition.
SYSTEM COMPLETION	The controlled process of demonstrating that a defined system or subsystem has reached the required state of construction, inspection, testing and documentation readiness for the next project phase.
COMMISSIONING RECORD	A controlled record generated during precommissioning, functional testing, start-up or commissioning to demonstrate execution and results of the specified activity.
HANDOVER PACKAGE	The controlled set of accepted documents, records and structured information transferred at a defined project completion or ownership milestone.
DOCUMENT TYPE	A controlled classification describing the purpose and content of a document or record. It is distinct from document identity, revision, workflow status and the asset identification scheme.
LIFECYCLE STAGE	The phase associated with a deliverable or activity, such as manufacturing, installation or commissioning. Stage identifies context; it does not establish review or acceptance status.

The distinction between ITP and ITPL used in this procedure is a convention adopted within the PQD-FH framework. Project-specific terminology, document hierarchy and the mapping of equivalent inspection and test planning documents shall be defined in Appendix A or the applicable project procedures.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

5. ROLES, RESPONSIBILITIES AND PACKAGE OWNERSHIP

The project organization shall assign clear accountability for FQD generation, verification, progressive compilation, review, acceptance and handover. Each FQD package shall have a clearly designated owner responsible for its completeness and readiness.

Responsibility for completion of an FQD package shall not reside solely with the Quality function.

Executing Organization / Subcontractor

- Generate and compile records progressively from the start of work.
- Ensure records are complete, legible, approved and traceable.
- Maintain current package index and status.
- Resolve deficiencies and review comments within agreed timeframes.

Package / System Owner

- Own completeness and readiness of the defined FQD package.
- Coordinate construction, QA/QC, commissioning, vendor and document-control inputs.
- Ensure expected deliverables are aligned with the execution look-ahead and package completion status.
- Confirm package readiness before formal submission.

FQD Coordinator

- Maintain package register, deliverables matrix and submission status.
- Coordinate internal readiness reviews and formal submissions.
- Track comments, overdue records and package close-out.

QA/QC

- Verify conformity of quality documentation and records with applicable ITP/ITPL, specifications and approved procedures.
- Confirm required inspections, tests and acceptance evidence are present.
- Verify NCR, deviation and quality-related open-point status against applicable completion and acceptance criteria.

Construction / Installation

- Ensure inspections and records are generated as work proceeds.
- Provide field identification, scope boundaries and completion evidence.
- Support resolution of missing or inconsistent records.

Commissioning

- Generate and control applicable pre-commissioning and commissioning records.
- Confirm that accepted commissioning evidence is transferred to, or formally referenced from, the applicable FQD package.

Document Control

- Maintain document numbering, revision, metadata, workflow status, CDE/EDMS registration and formal transmittal.
- Preserve controlled status and accepted versions.
- Maintain the controlled document classification and project-code mapping, in coordination with the relevant disciplines and the FQD Coordinator.

Contractor

- Define or approve the FQD structure, package breakdown and project submission process.
- Review FQD for completeness, conformity, traceability and document-control compliance.
- Coordinate Client/Owner comments where applicable.

Client / Owner

- Define owner-specific handover and information-management requirements.
- Review and approve FQD where required by contract or project procedures.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

- Confirm final acceptance in accordance with project completion process.

Supplier / Vendor

- Provide required certificates, declarations, datasheets, manuals, factory records and test documentation.
- Maintain traceability to the applicable product, equipment, serial number, batch, lot or other required identifier.

6. FQD PLANNING AND PACKAGE BREAKDOWN STRUCTURE

6.1 Package Planning

Prior to, or during the early stages of, execution of the applicable scope, the organization shall define the FQD Package Breakdown Structure (PBS).

The PBS shall establish a manageable relationship between the physical or functional project scope and the documentation packages required for progressive compilation, review, completion and handover.

The package breakdown may be based on project, system, subsystem, area, discipline, work package, equipment group, construction package, commissioning system or another controlled structure.

The selected approach shall support clear package boundaries, ownership, traceability, progressive completion and efficient review and acceptance.

6.2 Minimum Package Definition

Each FQD package shall define, as a minimum:

- unique package identifier;
- package title and scope description;
- applicable system, subsystem, area, discipline or other scope reference;
- package owner;
- planned execution, completion and submission milestones;
- required FQD index or deliverables set;
- package boundaries and interfaces with other packages; and
- current package status.

6.3 Package Boundary Control

Each package shall clearly define the scope included and, where necessary, the scope excluded.

Overlaps, gaps and unclear interfaces between FQD packages shall be identified and resolved sufficiently early to prevent incomplete or duplicated documentation at completion and handover.

Records applicable to more than one FQD package may be maintained in a controlled common location or another controlled package, provided that the applicable relationship, reference and retrieval path remain clearly identifiable and traceable.

Where turnover or commissioning packages use boundaries different from the FQD package breakdown, their identifiers and scope relationships shall be recorded in the package register or a linked controlled register. Boundary drawings shall identify their revision and the scope represented. An annotation defining a package boundary shall be distinguishable from a mark-up recording an installation or design change.

7. FQD DELIVERABLES IDENTIFICATION AND REQUIREMENTS MATRIX

7.1 Basis of Required Records

The required documentation and records for each FQD package shall be identified from the applicable contract, statutory and regulatory requirements, technical specifications, drawings, approved procedures, ITP/ITPL, WAP where used, vendor requirements, completion criteria and project handover requirements.

The identified requirements shall define the minimum evidence necessary to demonstrate conformity, completion and readiness for acceptance of the applicable scope.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

7.2 FQD Deliverables Matrix

A controlled FQD Deliverables Matrix shall be established before, or during the early stages of, execution to identify what documentation and evidence is required, the source of the requirement, who is responsible for providing it, when it is required and where it will be incorporated within the FQD structure.

Appendix C provides a generic template.

The matrix shall establish, as a minimum, the following relationship:

Requirement Source
Activity / Item
Acceptance Criterion
Required Document / Record
Responsible Party
Planned Date
FQD Package / Section
Status

Each required deliverable shall have a unique controlled reference, such as a Deliverable ID or an equivalent reference maintained in the project registers or information system. As supporting records become available, this reference shall link the requirement to the corresponding document or record IDs and applicable revisions in the document register. Where a deliverable requires several records, the expected record population and the status of each required record shall remain identifiable. Counts reported in Appendix F shall be traceable to these requirements and supporting records, allowing missing records, duplicate entries and superseded versions to be distinguished.

7.3 Link to ITP / ITPL

Where an ITP/ITPL is used, the documents and records specified by the ITP/ITPL shall be mapped to the relevant FQD package and section.

Inspection forms, checklists, test sheets and other required evidence shall be identified sufficiently early to confirm that the planned records will be adequate to demonstrate conformity with the applicable acceptance criteria.

7.4 Look-Ahead Review

The FQD Deliverables Matrix shall be periodically reviewed against the applicable short-term construction, installation, inspection, testing and commissioning look-ahead programme.

The purpose of the review is to identify upcoming inspections, tests, approvals, vendor documentation and completion records before the associated work or milestone occurs, allowing missing requirements, documentation gaps or potential delays to be identified and addressed in advance.

7.5 Document Classification and Project Code Mapping

The project shall define a controlled document classification suitable for the applicable disciplines and required deliverables. Each type shall have a defined name, purpose and scope; type codes shall be used where required by the project. Ambiguous or overlapping categories shall be resolved through the project document-control process.

The deliverables matrix shall identify the required document type and lifecycle stage, directly or through a linked classification register. Project, client and supplier codes shall be mapped to the adopted classification where necessary. Original document identifiers shall remain traceable. This procedure does not prescribe a universal document-type code set.

Appendix D.4 provides informative document groups and their typical FQD destinations. A document type, lifecycle stage, FQD section and workflow status describe different attributes. Their mapping shall not imply that every document in a group is required or that classification confirms acceptance.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

8. PROGRESSIVE COMPILATION AND QUALITY RECORD GENERATION

8.1 Progressive Compilation

Quality documentation and records shall be incorporated into the relevant FQD package progressively, once they have achieved the required controlled project status.

Progressive compilation reduces the risk of missing records, broken traceability, late reconstruction, uncontrolled or superseded revisions and delayed package completion or handover.

8.2 Record Generation at Source

Quality records shall be generated by the organization or function performing, witnessing, verifying or accepting the associated activity, as applicable.

Records shall be created at, or as close as practicable to, the time the activity is performed. Late reconstruction of records from memory, undocumented verbal information or uncontrolled sources shall not be used as a substitute for contemporaneous objective evidence.

8.3 Supply Chain Flow-Down

Applicable FQD requirements shall be communicated and flowed down to subcontractors, manufacturers and suppliers responsible for generating or providing quality documentation and records.

Required vendor, manufacturing and factory documentation shall be identified sufficiently early to allow review, comment resolution and correction before shipment, delivery or final package submission, as applicable.

Where manufacturing or factory quality dossiers are required, the supplier shall compile them as production, inspection and testing proceed. Their indexes shall identify constituent records, revisions and outstanding items. Receipt or acceptance of a manufacturing dossier shall not, by itself, demonstrate completion of subsequent installation or site testing.

8.4 Record Quality

Quality records shall be:

- legible and complete;
- correctly identified;
- traceable to the applicable scope, activity and requirement;
- signed, authenticated or approved where required;
- revision-controlled where applicable;
- consistent with related documentation and free from unresolved contradictions;
- stored within the approved controlled document or information-management environment; and
- suitable for subsequent review and verification without dependence on undocumented verbal knowledge.

8.5 Evidence Across Lifecycle Stages

Required manufacturing, installation and commissioning evidence shall remain identifiable by stage and linked to the same applicable equipment or system scope. A record may support several packages or milestones where its applicability is confirmed through controlled references. Later inspections or tests shall be added as distinct records; earlier results shall remain traceable. Missing evidence at a stage shall be identified and dispositioned against the requirements for the relevant milestone.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

9. STANDARD FQD PACKAGE STRUCTURE

The following structure provides a generic model for an FQD package. The project may adapt, combine, omit or expand individual sections, provided that the resulting package remains complete, controlled and traceable and that applicable project requirements are satisfied. Sections that are not applicable may be designated as N/A in accordance with the applicable project approval process.

No.	Section	Purpose / Minimum Content
00	**Cover and Identification**	Project/facility, package/system, discipline, organization, document number, revision and status.
01	**Document Control**	Revision history, approval status, transmittal and document-control information.
02	**FQD Index**	Controlled contents and document register, including classification, asset links and retrieval references.
03	**Scope and Boundaries**	Description of included physical/functional scope and interfaces.
04	**Applicable Requirements**	Contract, specifications, approved procedures, drawings, codes and standards, or controlled references.
05	**Quality Plan / ITP / ITPL / WAP**	Applicable approved quality and execution planning documents.
06	**Approved Design Documents**	Approved drawings, datasheets, schedules and technical documents, or controlled references.
07	**Material / Equipment Register**	List of materials and equipment requiring quality evidence.
08	**Material / Product Compliance Records**	MCR, certificates, declarations, approvals and product conformity evidence as applicable.
09	**Material / Equipment Traceability**	Mapping between installed item, serial/batch/lot and supporting records.
10	**Vendor Documentation**	Datasheets, manuals, manufacturing dossiers, factory records and required vendor test documentation, with constituent records traceable.
11	**Personnel Qualifications**	Required competence, authorization or qualification records where applicable.
12	**Inspection Records**	RFI, checklists, inspection reports and acceptance records.
13	**Test Records**	Site test reports, measurements, functional tests and other required test evidence.
14	**Calibration / Verification Records**	Evidence for measuring and test equipment used to establish acceptance, where required.
15	**NCR / Deviation Records**	NCRs, approved concessions/deviations and closure/disposition evidence.
16	**Punch / Open Points**	Registers and closure evidence for quality-related open items.
17	**Completion Records**	Completion checklists, certificates and milestone records.
18	**Precommissioning / Commissioning Records**	Applicable readiness, loop, functional, precommissioning or commissioning evidence, or controlled references to records maintained under the applicable completion / commissioning process.
19	**Red-Line / As-Built Reference**	Controlled reference to applicable RLM and final As-Built documentation maintained under the relevant project process.
20	**FQD Acceptance and Close-Out**	Final FQD review, comment resolution, approval and evidence of package acceptance in accordance with applicable project requirements.
21	**Controlled Electronic FQD Package**	Controlled PDF and native files, registers, indexes and structured data; software and configuration deliverables where required by the handover scope.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

10. MATERIAL AND EQUIPMENT DOCUMENTATION

10.1 Material / Equipment Documentation Lifecycle

Material and equipment documentation shall distinguish, where applicable, between approval of the product or equipment type, conformity and identification of the delivered item, traceability to the installed item or location, and the final controlled evidence incorporated into or referenced by the FQD.

A generic lifecycle is:

Material / Product Requirement
Technical / Material Approval
Supplier / Manufacturer Documentation
Delivery / Receipt Identification
Installation Traceability
Inspection / Test
Final FQD Evidence

10.2 Material / Equipment Index

Where product conformity, certification or traceability is required, the FQD shall include or reference a controlled Material / Equipment Index linking the delivered or installed item to the applicable approval, certificate, declaration, MCR, supplier or manufacturer documentation and inspection / test evidence.

Where applicable, the index shall also identify the relevant batch, lot, heat, drum, serial number or other controlled traceability identifier.

10.3 Risk-Proportionate Traceability

Traceability requirements shall be proportionate to the applicable statutory, contractual, technical and quality requirements and to the risk associated with the material or equipment.

The project shall define the required level of traceability, including where batch, lot, heat, drum, serial number or other manufacturing or unique identifiers are mandatory.

Unit-level traceability shall not be required where batch-, lot- or type-level traceability is sufficient to demonstrate conformity with the applicable requirements.

10.4 Typical Traceability Chains

- Equipment: Tag / asset ID -> manufacturer -> model -> serial number -> certificate / datasheet -> inspection / test records.
- Cable: Cable ID -> cable type -> manufacturer -> batch/drum identifier where required -> certificate -> installation / test record.
- Instrument: Instrument tag -> manufacturer -> model -> serial number -> calibration evidence -> loop / functional test record where applicable.
- Material: Installed location/item -> manufacturer/supplier -> batch/lot/heat identifier where required -> certificate/declaration -> inspection record.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

11. INSPECTION, TEST AND CALIBRATION RECORDS

11.1 Inspection Records

Inspection records shall identify the inspected item or scope, applicable reference documents, date, result, acceptance status and responsible parties.

Where an ITP/ITPL is used, inspection records shall be traceable to the applicable inspection activity, acceptance criteria and associated RFI or other controlled inspection reference, where applicable.

Approval of an inspection request or notification, acceptance of the inspected work, closure of associated punch items and acceptance of the FQD package shall be treated as separate decisions, where applicable. The status of an individual inspection record shall not, by itself, establish the acceptance status of the FQD package.

Where an inspection is rejected, interrupted or not performed, the record shall identify the reason and distinguish the scope actually inspected from any scope not inspected. Subsequent inspection records shall remain traceable to the original record, any required corrective actions or outstanding prerequisites, and the resulting disposition.

11.2 Test Records

Test records shall identify the tested item or scope, test date, applicable test method or procedure, test equipment used where relevant, measured or observed results, acceptance criteria, final result or status and responsible parties. The test time and relevant test conditions shall also be recorded where necessary for interpretation or verification of the results.

The record shall contain sufficient information to allow subsequent verification of the test performed and the basis for the acceptance conclusion. Where permitted by the applicable record requirements, detailed results may be provided in separate controlled reports or attachments, provided that these are unambiguously referenced, relate to the same tested scope and remain retrievable. Such references shall identify the applicable revision or issue, where relevant.

Where a test fails, is interrupted or is declared invalid, the original record shall be retained and shall identify the test status, the scope actually tested, the results obtained and the reason where known. Any investigation, correction, corrective action or other required disposition shall remain traceable to that record. Subsequent test records shall identify the original test reference, the scope retested and the resulting acceptance decision. A successful retest shall not overwrite or obscure the original results or any applicable non-conformity and closure history.

11.3 Calibration / Verification Records

Where measuring or test equipment is used to establish acceptance, valid calibration or verification evidence shall be available where required by the applicable quality plan, ITP/ITPL, procedure, specification, statutory requirement or contract.

Where traceability is required, the measuring or test equipment shall be identifiable on, or traceable from, the applicable inspection or test record.

Calibration or verification status shall be valid at the time the measurement or test is performed.

Where measuring or test equipment is subsequently found to be defective, outside specified limits or otherwise unsuitable for its intended use, the potential impact on the validity of previous results obtained using that equipment shall be assessed and documented in accordance with the applicable equipment-control or non-conformity procedure.

Affected records and FQD packages shall be identified. The assessment, approved disposition and any required reinspection, retesting or changes to acceptance status shall remain controlled and traceable to the affected records and scope.

11.4 Hold and Witness Points

Evidence of release, attendance, waiver or other controlled disposition of applicable hold and witness points shall be retained in accordance with the approved ITP/ITPL and applicable project procedures.

Where a hold or witness point is waived, released or otherwise dispositioned without attendance, the applicable authorization and disposition shall remain traceable.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

11.5 Templates and Completed Records

Blank forms and templates shall be distinguishable from completed inspection or test records, even where the project assigns them the same document-type code. A completed record shall identify the form or procedure revision used, where applicable, and contain the activity-specific scope, results and required authentication.

A blank, partly completed or unauthenticated form shall not be counted as accepted evidence where a completed and authenticated record is required. Incomplete records shall remain visible as open deliverables. Reissued forms shall not overwrite executed records; corrections and replacement records shall preserve the original evidence and the applicable review history.

For records included in or referenced by the FQD, the identity, organization, role and authority of each required signatory shall be identifiable from the record or its controlled approval workflow. Signatures, electronic approvals and stamps, where required, shall correspond to the designated role and be applied in the appropriate fields or workflow steps.

12. TRACEABILITY AND RECORD INTEGRITY

12.1 Record Integrity Controls

FQD traceability shall enable a reviewer to move reliably between the physical or functional scope, the applicable requirement, the relevant activity and the documented evidence demonstrating conformity.

As a minimum:

- identifiers shall be used consistently across drawings, registers, inspection records, test reports, certificates and other related documentation;
- corrections to controlled records shall be made in accordance with the applicable document-control requirements and, where required, without obscuring the original entry;
- revision, approval and status information shall remain identifiable for controlled documents and records;
- uncontrolled screenshots, e-mail fragments, informal notes or working files shall not be used as substitutes where a formal controlled record is required;
- references to records maintained in external packages, registers, databases or information systems shall be stable, controlled and retrievable;
- electronic records shall preserve their identity, integrity, readability and retrievability throughout the applicable retention period;
- relationships between superseded and current records shall remain traceable where relevant to the acceptance history; and
- record integrity shall be preserved through controlled storage, access, revision and transfer processes.

12.2 Asset and System Identification

The project-approved identification scheme, including KKS where adopted, shall provide the link between physical or functional scope and its documentation. Asset or system identifiers shall remain distinguishable from document-type codes, document numbers and package identifiers. A document covering several assets shall retain its full scope through a controlled relationship list or register.
For electrical and I&C scope, identifiers and connections shall be consistent across applicable equipment and instrument lists, cable lists, wiring and termination documents, I/O lists and inspection or test records. Changes to identifiers shall retain traceable links between former and current designations, affected records and packages.

12.3 Document Register Metadata

The document register shall identify the document or record ID, title, revision, status, FQD package and section, and controlled file location. It shall also identify the document type, lifecycle stage and related system, asset or scope; applicable change references shall be included where a record is affected by a controlled change. Required approval or acceptance evidence shall be retrievable from the register or the linked controlled workflow. These attributes may be held in linked registers or the CDE/EDMS rather than repeated in every filename. Relationships to multiple assets, changes or packages shall remain retrievable without creating uncontrolled copies. Appendices D.2 and D.3 illustrate the main document register and its linked classification and scope metadata table, respectively.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

13. NON-CONFORMITIES, DEVIATIONS AND OPEN POINTS

Quality-related NCRs, approved deviations or concessions, and open points associated with the FQD scope shall be identified within the package or through controlled references. Their status, disposition and impact on acceptance shall be reviewed against the applicable completion and handover criteria.

Where an inspection or FQD package is accepted with comments or conditions, the acceptance decision shall identify the outstanding items directly or by reference to a controlled punch list or equivalent register. Each open item shall have a unique reference, a description of the issue and affected scope, an assigned responsible party, and a required closure date or milestone.

Closure shall be supported by evidence of the completed action and verification by the party authorized under the applicable project requirements. Signing or acknowledging a punch list shall not, by itself, be treated as evidence that its individual items are closed.

Additional records generated during resolution or closure shall be incorporated into the applicable FQD package or referenced from a controlled supplementary package or information system. Closure evidence and verification shall remain traceable to the original item and affected scope.

An FQD package shall not be declared fully complete where unresolved quality issues remain incompatible with the defined acceptance criteria. Projects may define conditional completion or acceptance statuses for permitted residual items, provided that such items are formally identified, controlled, assigned and subject to agreed closure requirements.

14. INTERFACE WITH RED LINE MARK-UP AND AS-BUILT DOCUMENTATION

The FQD shall identify and maintain the applicable interface with the Red Line Mark-Up and As-Built documentation process but shall not duplicate the detailed control requirements where a dedicated PQD-FH procedure applies.

The FQD package shall provide evidence that field changes affecting the documented scope have been identified, captured and transferred into the controlled Red Line Mark-Up / As-Built process.

As a minimum, the FQD shall include or provide controlled reference to:

- the applicable Red Line Mark-Up register, mark-up package or other controlled change record;
- confirmation that relevant field changes have been incorporated into the applicable controlled documentation or formally dispositioned;
- the applicable final As-Built documentation where required by the project completion or handover criteria;
- the status and disposition of unresolved discrepancies between the installed condition and the controlled technical documentation; and
- evidence that outstanding documentation changes affecting FQD acceptance remain identified and controlled.

14.1 Affected Documents and Change References

For each field change affecting FQD evidence, the relevant change record shall identify the affected scope and documents, their revision or incorporation status, and any required verification or retesting. The FQD shall include or reference this information and the applicable approval or disposition. Recording a red-line annotation shall not, by itself, authorize a design change.

The review shall consider related document types, not only the marked drawing. For example, a changed instrument connection may affect the wiring diagram, termination schedule, cable list and I/O list; a changed location may also affect installation and location drawings. Required updates and discrepancies shall remain traceable until incorporated or formally dispositioned under the applicable RLM / As-Built process.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

15. INTERFACE WITH SYSTEM COMPLETION AND COMMISSIONING

FQD shall support system completion and commissioning by providing verified construction, installation and quality evidence required to demonstrate readiness of the applicable scope.

Detailed system completion, pre-commissioning and commissioning methodology remains outside the scope of this procedure unless specifically incorporated by the applicable project requirements or procedures.

Applicable completion, pre-commissioning and commissioning records may be incorporated directly into the FQD or maintained within a separate controlled completion or commissioning dossier and referenced from the FQD.

The selected approach shall preserve traceability between the applicable system, subsystem or work package, the completion or commissioning activity and the supporting evidence, while avoiding unnecessary duplication of controlled records.

Where separate completion or commissioning dossiers are used, the applicable references, status and package interfaces shall remain controlled and retrievable.

Where staged turnover is used, the FQD shall identify the milestone supported by each submission and the applicable construction, installation or commissioning evidence. Transfer of a package to commissioning shall not be represented as final acceptance of the complete commissioning or handover scope.

16. FQD PACKAGE READINESS REVIEW

Before formal submission, each FQD package shall undergo an internal readiness review. The purpose of the review is to confirm that the package is complete, coherent, controlled and suitable for formal submission, and to prevent incomplete, contradictory or uncontrolled documentation from entering the formal review and acceptance workflow.

16.1 Minimum Readiness Criteria

As a minimum, the readiness review shall confirm that:

- package scope and boundaries are defined and confirmed;
- required deliverables are identified and present or formally referenced;
- applicable ITP/ITPL activities and associated records are complete to the required milestone;
- material and equipment conformity and traceability are complete where applicable;
- inspection and test records have been reviewed, achieved the required status and are supported by the applicable results, referenced reports and attachments demonstrating the basis for acceptance;
- NCRs, deviations, concessions, punch items and other quality-related open points have been reviewed against the applicable milestone and acceptance criteria; items required to be closed have verified closure evidence, and any permitted residual items have an assigned responsible party and agreed closure requirements;
- the Red Line Mark-Up / As-Built interface status has been confirmed;
- revisions, signatures, approvals, required stamps, status and document-control metadata are correct, and the roles and authority of required signatories are verifiable;
- the FQD index accurately reflects the package content;
- electronic files are readable, retrievable, searchable and correctly named where required;
- references to records maintained in other controlled packages or systems are valid and retrievable;
- open comments, actions or residual items are identified and dispositioned in accordance with the applicable project requirements; and
- document classification, asset links and change references are consistent; required software or configuration deliverables are identified and available to the required status.

Appendix G provides a generic FQD Package Readiness Checklist.

16.2 Readiness Status

Following the readiness review, the FQD package shall be assigned an appropriate readiness status in accordance with the applicable project process.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

Where permitted by project requirements, a package may be designated as conditionally ready where residual items remain open but do not prevent submission or acceptance at the applicable milestone. Such items shall remain identified, assigned, controlled and subject to defined closure requirements. A package shall not be designated as ready where outstanding issues prevent demonstration of conformity, completeness or compliance with the applicable acceptance criteria.

17. SUBMISSION, REVIEW, COMMENT RESOLUTION AND ACCEPTANCE

17.1 Generic Workflow

The generic FQD submission and acceptance workflow is:

Compile
Self-check
Package Readiness Review
Ready for Submission
Formal Submission
Review
Comment Resolution / Resubmission
Acceptance
Package Close-Out

17.2 Review Comments

Review comments shall be formally recorded, traceable and controlled through to closure.
As a minimum:

- each comment shall be linked to the applicable document, record, package or section;
- comment status and disposition shall remain identifiable;
- revised documents shall retain controlled revision and approval status;
- closed comments shall be demonstrably incorporated or formally dispositioned;
- responses and resulting revisions shall remain traceable to the applicable review cycle;
- superseded files shall remain identifiable and shall not be presented as current accepted records; and
- unresolved comments affecting acceptance shall remain visible and controlled.

17.3 Partial / Progressive Submissions

Partial, staged or progressive submissions may be used to support system, subsystem, area or work-package completion, provided that the applicable package boundaries, submission status, revision control and acceptance status remain clearly identifiable.

Progressive submissions shall be consolidated or cross-referenced as required to ensure that the final accepted FQD package is complete, coherent and free from uncontrolled duplication or gaps.

17.4 Acceptance and Package Close-Out

FQD acceptance shall confirm that the submitted package has achieved the required review and approval status in accordance with the applicable project requirements.

Acceptance of an FQD package shall not, by itself, constitute final project handover unless explicitly defined by the applicable project process.

Following acceptance, the final controlled package status, revision, acceptance evidence and applicable submission references shall be retained as part of the FQD record.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

17.5 Changes After Acceptance

Changes to an accepted FQD package, or new information affecting the validity of its supporting evidence, shall be controlled through the applicable project change and document-control processes. The reason, affected scope, documents and records shall be identified, and the impact on conformity, previous results and package acceptance shall be assessed.

The Package Owner shall coordinate the assessment and obtain a documented decision from the designated authority on any required document updates, reinspection, retesting, package reopening or resubmission. Where existing acceptance is no longer supported, the package status shall be revised and affected recipients notified without waiting for resubmission.

Approved changes shall be incorporated through a controlled package revision or supplement, with the required review and acceptance evidence. The package index, affected registers and current baseline identification shall be updated, and the revised information formally transmitted to the designated recipients. The previously accepted baseline, change history and relationship between the original package and any supplement shall remain traceable.

18. FQD STATUS CONTROL, REPORTING AND KPI

A controlled FQD package register shall be maintained to provide current visibility of package status, progress, outstanding actions and planned submissions.

Status reporting shall be aligned with applicable project milestones and the short-term execution look-ahead to support timely identification of delayed packages, missing records and upcoming submission requirements.

18.1 Recommended Status Categories

Typical generic FQD package statuses are:

Planned
In Progress
Internal Review
Ready for Submission
Submitted
Under Review
Comment Resolution
Resubmitted
Accepted
Closed

Each FQD package shall have one current primary status at a time.

Where applicable, the project may introduce additional statuses such as

Conditionally Ready
Conditionally Accepted
On Hold
Rejected / Revision Required

Project-specific status codes, definitions and permitted status transitions shall be established in Appendix A or the applicable project procedure.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

18.2 Typical Management Information

Status reporting should include, as applicable:

- total planned FQD packages;
- packages in progress;
- packages under internal review;
- packages ready for submission;
- packages submitted or under review;
- packages under comment resolution or resubmission;
- packages accepted and closed;
- overdue packages or required records;
- packages affected by unresolved critical records, NCRs or other open points; and
- upcoming submissions based on the execution look-ahead.

18.3 Example KPI

A generic FQD Completion KPI may be calculated as:

FQD Completion (%) = (Packages with current status Accepted or Closed / Total Planned Packages) × 100

Where this KPI is used, the denominator shall be based on the current approved FQD package baseline.

The KPI shall not be used in isolation where partially complete packages, overdue critical records, unresolved quality issues or conditional acceptance statuses could materially affect readiness or final completion.

Supporting package-level status information shall therefore remain available.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

18.4 KPI Calculation and Control Rules

FQD KPI calculations shall be based on an approved methodology, a defined reporting date and controlled package-status criteria. Reported results shall clearly distinguish full package acceptance, conditional acceptance, partial progress and package close-out.

The following rules shall apply:

- **Denominator control:** The total number of planned FQD packages shall be based on the approved package baseline applicable at the reporting date. Packages shall not be excluded solely because they are delayed, incomplete, on hold or difficult to close. Where the denominator is zero or no package baseline has been approved, the KPI shall be reported as not applicable or not yet established, as appropriate, rather than as 0% or 100%.
- **Baseline changes:** Additions, deletions, combinations or splits of FQD packages affecting the denominator shall be formally approved and traceable to the applicable project change or package-control process. Their effect on the reported KPI shall remain identifiable so that changes in scope are distinguishable from actual completion progress.
- **Numerator control:** For the FQD Completion KPI defined in Section 18.3, only packages with a current status of Accepted or Closed for the full package scope and target milestone represented by the approved KPI baseline shall be included in the numerator. Acceptance of a partial submission or an earlier milestone shall not qualify the complete package for inclusion against a broader scope or later milestone. Each package shall be counted once. Where project-specific status names are used, their equivalence to these categories shall be defined and approved. The package registers or linked controlled acceptance record shall identify the accepted scope and milestone, package revision or baseline reference, acceptance date and acceptance decision reference.
- **Conditional acceptance:** Packages with Conditionally Accepted status shall be reported separately and excluded from the numerator of Section 18.3 KPI. They shall become eligible for inclusion only after the conditions preventing full acceptance have been satisfied or formally resolved through the applicable approval process and the resulting Accepted or Closed status has been confirmed by the designated authority.
- **Alternative project indicators:** Projects may adopt additional or alternative indicators, including weighted progress or indicators that include conditionally accepted packages. The indicator name, calculation method, eligibility criteria and any weighting shall clearly identify what is being measured. Where conditionally accepted packages contribute to an indicator, their contribution and outstanding conditions shall remain separately identifiable. Such indicators shall not represent those packages as fully accepted or closed.
- **Overdue packages and records:** Overdue packages and required records shall remain visible in the supporting reporting, together with their responsible parties, outstanding actions and impact on the applicable submission, acceptance or completion milestones.
- **Critical records and unresolved issues:** Missing critical records, required approvals, unresolved NCRs and other issues affecting acceptance shall remain visible in the completion assessment. A package shall not be assigned or retain a status that is inconsistent with its current acceptance evidence solely to improve the reported KPI.
- **Not-applicable items:** Packages or deliverables may be excluded from the applicable completion assessment only where their N/A disposition is justified, documented, approved and reflected in the relevant controlled baseline or deliverables matrix. Designating an individual deliverable as N/A shall not, by itself, remove the associated package from the package-count denominator.
- **Partial completion:** Partially complete packages shall not be counted as fully completed under Section 18.3. Where partial progress contributes to another approved indicator, the measurement basis and any weighting shall be defined and applied consistently.
- **Status integrity and reporting evidence:** KPI results shall be traceable to the package baseline, reporting date and package-level status records used in the calculation. Where a package is reopened or its acceptance status changes, subsequent reporting shall reflect the revised status. Previous reported results and the reasons for material changes shall remain traceable.

Section 18.3 KPI measures the proportion of packages with Accepted or Closed status. A result of 100% does not, by itself, demonstrate that all packages are Closed or that final project handover has been completed. Supporting reporting shall retain visibility of outstanding close-out actions and applicable handover requirements.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

19. ELECTRONIC FQD DELIVERY, CDE/EDMS AND CONTROLLED BASELINE

The project-approved CDE and/or EDMS shall be used for controlled submission, review, acceptance and storage of FQD documentation where such systems are specified.

Only documents and records that have achieved the required controlled status shall form part of the accepted FQD baseline.

19.1 Electronic Package Requirements

The electronic FQD package shall, as applicable, provide:

- controlled, searchable PDF or equivalent approved format;
- native files and structured registers where required;
- document and file naming in accordance with project requirements;
- bookmarks or equivalent navigation for large packages where practicable;
- stable and retrievable references between the FQD index and contained or externally referenced records;
- preservation of document identity, revision, approval and acceptance status;
- file readability and retrievability throughout the applicable retention period;
- preservation of file and package integrity during controlled transfer and storage; and
- clear identification of the current accepted version, without uncontrolled or superseded versions being presented as current records.

19.2 Hard Copy

Hard-copy requirements, including binder type, number of copies, volume limits, printing requirements and cover / spine format, are project-specific and shall be defined in Appendix A or the applicable project document-control requirements, where required.

19.3 Language

Required languages and bilingual documentation requirements are project-specific and shall be defined in Appendix A or the applicable project information-management requirements.

Original manufacturer or supplier documentation may be retained in its original language where permitted by the contract and applicable project requirements.

Where translation is required for review, acceptance or handover, the translated version shall remain identifiable and traceable to the applicable source document.

19.4 Software and Configuration Deliverables

Where included in the contractual or approved handover scope, controller programs, native project files, configuration datasets and device settings shall be delivered or referenced in a controlled location. Readable programming documentation and executable, editable or restorable files shall be identified separately according to their intended use.

The register or a linked manifest shall identify the target equipment or system, software or configuration version, required engineering-tool version and applicable restoration or verification instructions. The delivered baseline shall be traceable to the tested and accepted configuration. Access, licensing and restoration requirements shall be agreed with the receiving organization; confidential credentials shall be transferred through the approved secure process.

20. RETENTION AND LONG-TERM RECORD PRESERVATION

Retention periods, archival media, access rights, security, backup, migration requirements and long-term preservation arrangements are project-, contractual- or Owner-specific and shall be defined in Appendix A or the applicable project information-management requirements.

Throughout the required retention period, electronic FQD documentation and records shall preserve, as applicable, their identity, readability, retrievability, revision and acceptance status, integrity, metadata and traceable relationship to the relevant physical assets, systems or project scope.

Where changes in storage technology, file format or information-management systems require migration, the migration process shall preserve record integrity, traceability and accessibility.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

21. REFERENCE FRAMEWORK AND GUIDANCE

The following standards, industry frameworks and guidance documents may support the development of project-specific quality documentation, progressive assurance and final handover requirements. They are not automatically mandatory unless invoked by applicable legislation, contract, technical specification or approved project procedure. Applicable editions and project-specific requirements shall be confirmed for each project.

Reference	Role in FQD / Handover Framework	Normative / Guidance Status
ISO 9001 — Quality management systems — Requirements	Overall QMS requirements and documented-information controls supporting the creation, control, retention and availability of objective evidence of conformity.	International requirements standard — normative where invoked by contract, applicable regulation or project QMS requirements.
ISO 10006 — Quality management — Guidelines for quality management in projects	Guidance for applying quality management within projects; supports project-specific quality governance, responsibilities, processes and handover planning.	International guidance standard — non-mandatory unless contractually adopted.
ISO 10005 — Quality management — Guidelines for quality plans	Guidance for establishing and controlling quality plans; supports definition of project quality controls, ITP/QCP interfaces and required quality records.	International guidance standard — non-mandatory unless contractually adopted.
ISO 10013 — Quality management systems — Guidance for documented information	Guidance for developing and maintaining documented information; supports document and record structure, control, accessibility and lifecycle management within the QMS.	International guidance standard — non-mandatory unless contractually adopted.
IEC 81346 series — Industrial systems, installations and equipment and industrial products — Structuring principles and reference designations IEC 81346-1 | IEC 81346-2	Structuring and reference-designation principles for systems and objects; supports consistent asset identification and traceable linking of FQD records to physical equipment and systems.	International horizontal standard series — normative where invoked by project or technical requirements.
EN 10204 — Metallic products — Types of inspection documents	Defines inspection-document types for metallic products; supports material certification, verification and traceability where applicable.	European Standard — normative where required by contract, purchase order, product specification or applicable requirements.
ISO/IEC 17025 — General requirements for the competence of testing and calibration laboratories	Establishes requirements for laboratory competence, impartiality and consistent operation; supports the reliability and acceptance of testing and calibration evidence included in FQD.	International requirements standard — normative where laboratory competence or accredited testing/calibration is required.
IEC 62337 — Commissioning of electrical, instrumentation and control systems in the process industry — Specific phases and milestones	Defines commissioning phases and milestones for electrical, instrumentation and control systems; supports commissioning records, completion status and handover gates.	International Standard — normative where invoked by contract or project commissioning requirements.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

Reference	Role in FQD / Handover Framework	Normative / Guidance Status
ISO 19650 series — Organization and digitization of information about buildings and civil engineering works, including BIM — Information management using building information modelling ISO 19650-1 | ISO 19650-2	Information-management framework for structured creation, exchange, versioning and delivery of project and asset information; supports digital FQD and information handover.	International standard series — applicable where adopted for project information management and digital handover.
CFIHOS (IOGP JIP36) — Capital Facilities Information Handover Specification	Industry information-handover framework for structured asset data, documents, information requirements, data models and reference data throughout capital-project handover.	Industry specification / framework — non-normative unless contractually adopted by the project.
Crossrail Learning Legacy — Supply Chain Quality Requirements case study	Non-normative industry case study illustrating progressive assurance, package-based certification, ITP-linked quality records, status tracking and flow-down of quality requirements through the supply chain.	Industry case study / good-practice reference — non-normative.
IOGP JIP33 — Standardized Procurement Specifications	Procurement framework linking Technical Requirements Specifications (TRS), Procurement Data Sheets (PDS), Quality Requirements Specifications (QRS) and Information Requirements Specifications (IRS); supports early definition of inspection, testing and supplier-documentation deliverables.	Industry procurement specification framework — non-normative unless an applicable specification is contractually adopted.
ISO 10007 — Quality management — Guidelines for configuration management	Guidance for configuration identification, change control, configuration status accounting and audit; supports revision control, approved-change incorporation and establishment of the final/as-built configuration.	International guidance standard — non-mandatory unless contractually adopted.
IEC 81355-1 — Industrial systems, installations and equipment and industrial products — Classification and designation of information — Part 1: Basic rules and classification of information	Provides classification and designation rules for information containers; supports document classification, metadata, information-kind coding and structured FQD indexing.	International horizontal standard — normative where invoked by project information-management requirements.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

APPENDICES AND EDITABLE TEMPLATES

Informative Tables and Editable Templates

The tables in Appendices A–I illustrate the recommended structure and information content of FQD registers, matrices and checklists. They are provided for guidance and project adaptation and are not intended to serve as completed or approved project records.

Editable versions are provided separately in the companion workbook

PQD-FH_01_Universal_FQD_Templates.xlsx.

The workbook release shall identify its revision, the corresponding revision of this procedure and the download location.

Before use, the editable templates shall be adapted to the applicable project requirements, including document identification, revision control, responsibilities and review or approval arrangements. Completed records shall be controlled in accordance with the applicable project document-control and information-management requirements.

Appendices A, D.1 and G are also available as separate fillable PDF forms with interactive fields for electronic completion. These forms complement the companion Excel workbook and are available from the same GitHub repository.

The companion workbook and its revision information are available in the **GitHub repository**.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

APPENDIX A - PROJECT-SPECIFIC REQUIREMENTS SHEET

This informative table provides a basis for identifying and documenting project-specific FQD requirements. The applicable requirements shall be recorded in a separate controlled project-specific document or in the relevant project procedures and reviewed and approved in accordance with the applicable project arrangements.

References in this procedure to requirements defined in Appendix A shall be understood as references to those controlled project-specific requirements.

The universal body of this procedure shall remain unchanged unless contractual or organizational requirements necessitate a formally controlled deviation.

Project Requirement	Value / Reference	Notes / Owner
Project / Facility		
Client / Owner		
Contractor		
Applicable document control procedure		
FQD numbering convention		
FQD package breakdown rule		
Required languages		
CDE / EDMS		
Required electronic formats		
Hard-copy quantities		
Hard-copy presentation requirements		
Maximum volume / file size		
Submission milestones and deadlines		
Review / approval route		
Required retention period		
Red-Line / As-Built dossier rule		
System Completion / Commissioning dossier interface		
Project-specific RFI meaning / code		
Project-specific WAP rule		
Project-specific MCR rule		
Mandatory package status codes		
Mandatory index / template		
Additional statutory / authority requirements		
Applicable standards / editions and requirement references		
Conditional readiness / acceptance authority and closure rules		
Record custody, access, backup and migration requirements		
Externally referenced records and receiving-party access		
Changes after acceptance and resubmission rules		
Document classification and project-code mapping		
Asset identification scheme and cross-reference rules		
Software and configuration handover scope		

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

APPENDIX B - FQD PACKAGE BREAKDOWN STRUCTURE / PACKAGE REGISTER

Package ID	Parent / System	Package Title / Scope	Discipline / Area	Package Owner	Planned Completion	Planned Submission	Status	Interfaces / Notes

Use unique controlled package IDs. Identify scope exclusions, shared records and boundary interfaces in Interfaces / Notes. In the same column, record the planned execution milestones or provide a reference to the controlled project schedule defining those milestones for the package. Status names and transitions shall follow the project-specific requirements established in accordance with Appendix A and the adopted project workflow.

Where turnover or commissioning boundaries differ, identify the related package IDs and boundary-document revisions in this register or a linked controlled register.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

APPENDIX C - FQD DELIVERABLES MATRIX

Package ID	Activity / Item	Requirement Source	Acceptance Criterion	Required Record	ITP / ITPL / WAP Ref.	Responsible Party	Planned Date	FQD Section	Status / Comment

Use one row per required deliverable and repeat the Package ID where necessary. Identify each deliverable by a unique controlled reference and link it to the supporting document or record IDs and applicable revisions, in accordance with Section 7.2. These references may be recorded in Status / Comment or maintained in a linked controlled register. Requirement references shall identify the applicable revision and clause/activity. Record justified N/A dispositions and their approval references in Status / Comment.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

APPENDIX D.1 - UNIVERSAL FQD PACKAGE INDEX

No.	Section	Applicability	Project Notes
00	Cover and Identification	Required	
01	Document Control	Required	
02	FQD Index	Required	
03	Scope and Boundaries	Required	
04	Applicable Requirements	Required	
05	Quality Plan / ITP / ITPL / WAP	As applicable	
06	Approved Design Documents	As applicable	
07	Material / Equipment Register	As applicable	
08	Material / Product Compliance Records	As applicable	
09	Material / Equipment Traceability	As applicable	
10	Vendor Documentation	As applicable	
11	Personnel Qualifications	As applicable	
12	Inspection Records	As applicable	
13	Test Records	As applicable	
14	Calibration / Verification Records	As applicable	
15	NCR / Deviation Records	As applicable	
16	Punch / Open Points	As applicable	
17	Completion Records	As applicable	
18	Precommissioning / Commissioning Records	As applicable	
19	Red-Line / As-Built Reference	As applicable	
20	FQD Acceptance and Close-Out	Required	
21	Controlled Electronic FQD Package	Required	

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

APPENDIX D.2 - DOCUMENT REGISTER

List every included or externally referenced controlled record. Identify the revision and status applicable to the submission milestone and the exact accepted revision at final handover. Use the package section numbers in Appendix D.1. Link this register to the metadata table in Appendix D.3 using Document / Record ID and revision.

Package / Section	Document / Record ID	Title / Scope	Revision	Status	File / controlled location	Included / Referenced

Use controlled relationship lists where one record covers multiple assets, changes or packages. Keep review and acceptance evidence retrievable through the register or the linked controlled workflow.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

APPENDIX D.3 - LINKED CLASSIFICATION AND SCOPE METADATA

Document / Record ID + Rev.	Document type / project code	Lifecycle stage	System / Asset / Scope	Change / RLM reference	Related package IDs

Use controlled relationship lists where one record covers multiple assets, changes or packages. Identify N/A where no change reference applies. Keep review and acceptance evidence retrievable through the register or the linked controlled workflow.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

APPENDIX D.4 - DOCUMENT CLASSIFICATION AND PROJECT MAPPING

Generic document group	Typical content	Typical FQD section	Project type / code
Requirements and identification	Specifications; technical and identification standards; approved project requirements.	04	
Quality and execution planning	Quality plans; ITP/ITPL; work activity plans; method statements and inspection or test procedures.	05	
Design and engineering information	P&IDs; single-line, wiring and termination diagrams; layouts; equipment, cable, instrument and I/O lists; datasheets.	06; 19 for final as-built references	
Product conformity and traceability	Material compliance records; certificates; declarations; item, serial, batch or lot relationships.	07–09	
Manufacturing and factory evidence	Manufacturing dossier and index; factory inspection and test records; supplier conformity evidence.	10; 08, 12 or 13 by record purpose	
Installation evidence	Installation conformity dossier; field inspection records; installation checks and measurements.	12–13; 17 for completion	
Commissioning evidence	Pre-commissioning and functional test records; system verification and commissioning completion evidence.	18; 17 for completion	
Competence and measurement assurance	Personnel qualifications and authorizations; calibration or verification records.	11; 14	
Nonconformity and change control	NCR and concession records; punch closure; change approvals; RLM and as-built incorporation references.	15–16; 19	
Operation and maintenance information	Required supplier manuals, operating or maintenance instructions, spare-parts information and training records.	10 or controlled handover reference	
Software and configuration	Required native controller projects, source files, parameter sets and configuration manifests; readable programming documentation.	21; linked design and test references	
Package control and acceptance	Package and document indexes; boundary definitions; transmittals; review, completion and acceptance records.	00–03; 17; 20–21	

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

APPENDIX E - MATERIAL / EQUIPMENT TRACEABILITY REGISTER

No.	Installed ID / Tag	Description	Manufacturer	Type / Model	Batch / Lot / Heat / Drum / Serial	Certificate / MCR / Doc ID + Rev.	Inspection / Test Ref.	Status
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Use the level of traceability required by the project. Include the installed location where no unique tag exists. Additional certificate and inspection references may be recorded in linked controlled registers.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

APPENDIX F - FQD COMPLETION STATUS REGISTER

No.	FQD Section / Deliverable	Required Y / N	Expected Records	Received	Reviewed	Accepted	Open Comments / Action	Owner	Due Date
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

Received, Reviewed and Accepted are cumulative counts of distinct required records, not additional totals. Do not count superseded duplicates or conditionally accepted records as fully accepted. For Required = N, record the approved N/A justification and reference. Link open actions to a controlled action register where needed.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

APPENDIX G - FQD PACKAGE READINESS CHECKLIST

Assess each criterion against the applicable submission milestone and project requirements. Record supporting evidence and any outstanding actions, responsible parties and due dates. Justify N/A entries and reference the applicable approval where required. Record the resulting readiness status and any authorized conditions in the package register or linked controlled review record.

No.	Readiness Criterion	Yes / No / N/A	Evidence / Reference	Action / Owner / Due Date
1	Package scope and boundaries confirmed			
2	Package owner identified			
3	Deliverables matrix current			
4	Required ITP / ITPL / WAP records present			
5	Material / product compliance evidence complete			
6	Required traceability complete			
7	Inspection records completed, authenticated and at required status; inspection outcomes, actual inspected scope and links to subsequent inspections verified where applicable			
8	Test records completed, authenticated and at required status; results and referenced reports or attachments verified against the applicable acceptance criteria			
9	Calibration / verification valid at the test date; any known subsequent equipment deficiencies assessed for impact on the results, with required actions completed or formally dispositioned against the applicable milestone criteria (Section 11.3)			
10	Hold / witness point dispositions recorded			
11	NCR / deviation status acceptable			
12	Punch / open-point status acceptable for the milestone; required closure evidence verified; permitted residual items have assigned owners and agreed closure requirements and dates or milestones			
13	RLM / As-Built status and affected-document updates confirmed			
14	Completion / commissioning interface confirmed			
15	Revisions, authentication and approvals correct; required stamps and signatory identities, roles and authority verified			
16	Index matches package content			
17	Files readable, retrievable and correctly named; searchable where required			
18	Review comments dispositioned			
19	External references accessible to designated recipients			
20	Document types, lifecycle stages and asset / system links consistent			
21	Manufacturing, installation and commissioning evidence reconciled to the milestone			
22	Required software / configuration files match the accepted baseline			

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

APPENDIX H - RECOMMENDED FQD PACKAGE STATUS CODES

Code	Status	Generic Meaning
PLN	Planned	Package defined but compilation not started.
IP	In Progress	Records are being generated and compiled.
IR	Internal Review	Package is undergoing internal completeness / conformity review.
RFS	Ready for Submission	Internal readiness criteria satisfied.
SUB	Submitted	Formally transmitted for review / acceptance.
UR	Under Review	Package is undergoing formal review by the designated reviewing authority.
CMT	Comment Resolution	Returned with review comments requiring action.
RSUB	Resubmitted	Reissued after comment resolution.
ACC	Accepted	Accepted by the designated reviewing authority to the required status.
CLO	Closed	Package accepted and all required close-out actions completed.
HOLD	On Hold	Progress paused pending defined prerequisite, decision or corrective action.
CRDY	Conditionally Ready	Optional. Submission permitted by an authorized decision with identified residual items, owners and closure dates.
CACC	Conditionally Accepted	Optional. Accepted subject to recorded conditions, assigned owners and agreed closure dates; distinct from full acceptance.
REJ	Rejected / Revision Required	Optional. Acceptance criteria not met; corrective action and resubmission required.

Project-specific status names and codes take precedence where defined in Appendix A or the project document-control procedure.

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0

APPENDIX I - EXAMPLE RESPONSIBILITY MATRIX

The following matrix is illustrative. Assign one accountable role per activity and define the allocation of work where several roles are responsible. Final acceptance authority shall follow the contract and approved project procedures.

R = Responsible | A = Accountable | C = Consulted | I = Informed | A/R = both Accountable and Responsible

Activity	Package Owner	FQD Coordinator	QA/QC	Construction	Commissioning	Document Control	Contractor PM	Client / Owner
Define package scope	A	C	C	R	C	I	C	I
Define required records	A	R	R	C	C	I	C	I
Generate construction records	A	I	C	R	I	I	I	I
Generate commissioning records	A	I	C	C	R	I	I	I
Verify quality records	C	C	A/R	C	C	I	I	I
Maintain package register	A	R	C	I	I	C	I	I
Package readiness review	A	R	R	C	C	C	I	I
Formal submission	A	R	C	I	I	R	I	I
Resolve review comments	A	R	R	R	R	C	C	C
Final acceptance	I	I	C	I	I	C	C	A/R

END OF DOCUMENT

© 2026 Arkadiusz Wójcik | CC BY-SA 4.0