

Division / Business Unit:

Interstate

Function:

Operational Readiness

Document Type:

Specification

Completion and Handover

COR-SP-001

Applicability

ARTC Network Wide

Publication Requirement

Internal / External

Document Status

Version #	Date Reviewed	Prepared by	Endorsed	Approved
1.0	28/02/2022	Cathy Wilson Configuration Business Analyst	Robert Rath Operational Readiness Manager	Ben Leske General Manager Planning and Development

Amendment Record

Amendment Version #	Date Reviewed	Clause	Description of Amendment

Disclaimer

This document has been prepared by ARTC for internal use and may not be relied on by any other party without ARTC's prior written consent. Use of this document shall be subject to the terms of the relevant contract with ARTC.

ARTC and its employees shall have no liability to unauthorised users of the information for any loss, damage, cost or expense incurred or arising by reason of an unauthorised user using or relying upon the information in this document, whether caused by error, negligence, omission or misrepresentation in this document.

This document is uncontrolled when printed.

Authorised users of this document should visit ARTC's intranet or extranet (www.artc.com.au) to access the latest version of this document.

Table of Contents

Table of Contents	2
1 Introduction.....	4
1.1 Purpose and Scope.....	4
1.2 Document Owner	5
1.3 Responsibilities	5
1.4 Definitions.....	6
2 Completion and Handover Overview	7
2.1 Disciplines	7
2.2 Phases	7
2.3 Work Packages	8
2.4 Inspection Walkthrough Process	8
2.5 Defects Identification and Management.....	9
2.6 Outstanding Works.....	10
2.7 Deliverables	10
3 Completion and Handover Management Plan.....	12
4 Construction Verification Phase.....	14
4.1 Civil and Structures requirements.....	14
4.2 Track requirements	14
4.3 Signalling and Electrical requirements.....	15
5 Acceptance Phase.....	16
6 Commissioning Phase.....	17
6.1 Civil and Structures requirements.....	17
6.2 Track requirements	17
6.3 Signalling and Electrical requirements.....	18
7 Practical Completion.....	19
7.1 Civil and Structures requirements.....	20
7.2 Track requirements	20
7.3 Signalling and Electrical requirements.....	20
7.4 Environment, Community, Sustainability and Heritage requirements	20
7.5 Other Completion and Handover requirements.....	20

8	Defect Liability Period Phase	21
	Appendices	22
	Appendix A – Installation Work Package	22
	A.1 Installation Work Package – Civil and Structures	22
	A.2 Installation Work Package - Track	22
	Appendix B – Commissioning Work Packages	23
	B.1 Commissioning Work Package – Civil and Structures.....	23
	B.2 Commissioning Work Package - Track.....	23
	B.3 Commissioning Works Package - Signalling and Electrical.....	23
	Appendix C – Handover Documentation Packages	24
	C.1 Handover Documentation Package - Civil and Structures.....	24
	C.2 Handover Documentation Package - Track.....	24
	C.3 Handover Documentation Package - Signalling and Electrical.....	24
	C.4 Handover Documentation Package - Environmental, Community, Sustainability and Heritage .24	
	Appendix D – Key Discipline Completion and Handover Process Charts	25
	D.1 Completion and Handover Process – Track, Civil and Structures.....	26
	D.2 Completion and Handover Process – Signalling and Electrical.....	27

1 Introduction

Prior to any rail infrastructure that forms part of the Works ("**Rail Infrastructure**") being put into operational use, operational readiness for the Rail Infrastructure shall be demonstrated by the Project following the processes set out in this Completion and Handover Specification (**Specification**).

To ensure a safe and efficient completion and handover of the Works, the Project shall:

1. comply with this Specification
2. develop and provide a Completion and Handover Management Plan for ARTC review, and
3. adhere to the Completion and Handover Management Plan.

1.1 Purpose and Scope

All Projects being delivered by ARTC are to comply with this Specification.

The size and complexity of the completion and handover process and deliverables will vary for each Project. The requirements of this Specification are designed to be scalable and tailorable to meet the individual Project's delivery strategy and ARTC's commissioning, completion and handover requirements for the Project. The completion and handover scope will be defined through the operational readiness process and agreed by ARTC and the Project. This Specification applies to the following Projects:

- Enhancement works, such as:
 - track slewing
 - adjusting existing horizontal geometry and track alignment
 - loop and siding extensions.
- Design and construction of:
 - brownfield projects
 - new greenfield corridors
 - new tunnels
 - new loops and sidings.

This Specification shall be adopted for Projects being delivered under the following delivery strategies:

- full delivery integration by a Contractor, including:
 - design and construct contract
- full and / or partial delivery integration using a combination of:
 - design only contract
 - supply only contract
 - construct only contract
 - test only contract.

The significance of scalability allows the completion and handover process and the strategies applied to be appropriate to the risks and needs of the Interstate Network.

For the purpose of this Specification, completion and handover applies to a fully compliant and vertically integrated railway that permits the safe operations of trains.

This Specification sets out the requirements for:

1. the efficient and safe handover of the Works from the Project to the Interstate Network with the objective of preventing additional costs, delays and safety risks arising from the commissioning, completion and handover of the Works
2. the Work Packages that must be prepared and delivered by the Project.

This Specification describes the Interstate Network's completion and handover process for the Rail Infrastructure and identifies key deliverables and Hold Points.

Returned Works Infrastructure is not covered by this Specification. The Project shall comply with the completion and handover requirements of the Returned Works Owner and manage this interface with Department of Transport, Victoria, VLine, Transport for NSW (TfNSW), the Country Regional Network (CRN) and Queensland Rail.

1.2 Document Owner

The General Manager Development and Planning is the Document Owner of this Specification.

The Operational Readiness Manager is the initial point of contact for all queries relating to this Specification.

1.3 Responsibilities

The Project Manager / Senior Project Manager, as the ARTC Representative, is responsible for the implementation of this Specification.

The Operational Readiness Manager is responsible for managing the operational readiness and commissioning, completion and handover processes.

1.4 Definitions

The following terms and acronyms are used within this document:

Term or acronym	Description
ARTC	Australian Rail Track Corporation Ltd.
ARTC Representative	For the purpose of this Specification, the ARTC Representative is the Project Manager or Senior Project Manager.
Project	For the purpose of this Specification, the following are considered to be representatives of the Project: <ul style="list-style-type: none">• Designer / Service Delivery Contractor• Construction Contractor• Environmental Representative.

2 Completion and Handover Overview

2.1 Disciplines

Four (4) key disciplines are used for the completion and handover process for the Rail Infrastructure:

1. Civil Works (civil and structures disciplines)
2. Rail Corridor Works (track disciplines)
3. Rail System Works (signalling and electrical disciplines)
4. Environment, Community, Sustainability and Heritage.

(each a "**Key Discipline**").

Each Key Discipline has a particular process in which to navigate through the completion and handover phases. Indicative flow charts are outlined in Appendix D – Key Discipline Completion and Handover Process Charts

2.2 Phases

The completion and handover process for the Rail Infrastructure consists of six (6) key phases, as described in Figure 1 – Completion and Handover Phases.

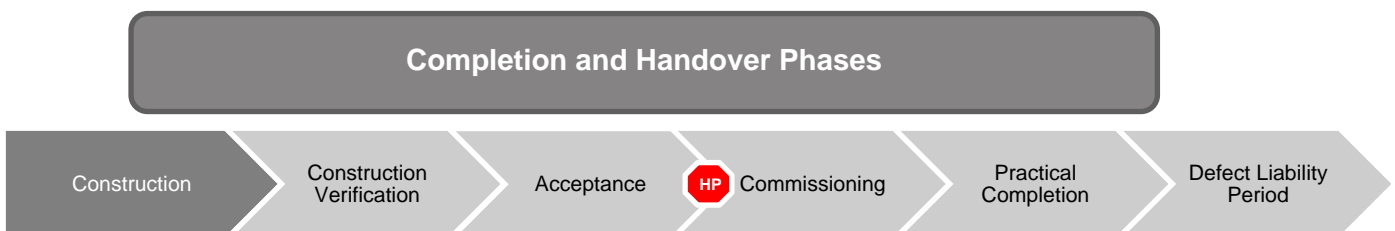


Figure 1 - Completion and Handover Phases

The phases listed in Figure 1 Completion and Handover Phases are further detailed in the relevant sections below.

A **HOLD POINT** exists between the Acceptance and Commissioning phases for each Key Discipline. The ARTC Representative shall only release this Hold Point for the Project to commence Commissioning for a Key Discipline once all of the following items have been delivered:

- review and acceptance by the ARTC Representative of completed Installation Work Package for the Construction Verification phase (refer Section 2.3)
- completion of inspection walkthrough (refer Section 2.4)
- submission of Defect List (refer to Section 2.5)
- rectification and close out of all Defects as assessed and detailed in:
 - the ARTC Track and Civil Code of Practice Response Booklet (ETW-00-01)
 - the ARTC Track and Civil Code of Practice Structure Inspection (ETE-09-01) and Structure Inspection Procedure (ETE-09-02)

- the ARTC Signals Technical Maintenance Plan (ESM-26-02) and Signals Service Schedules / Standard Jobs Work Instruction (ESW-26-01)
- review and acceptance by the ARTC Representative of the Commissioning Work Package template.

2.3 Work Packages

The Project shall provide to the ARTC Representative completed Work Packages for each phase in the respective Key Disciplines as detailed in Work Packages by Key Discipline and Phase below.

Work Package templates have been developed to guide and assist the Project with meeting the minimum installation, commissioning and handover requirements.

Work Packages shall be submitted by the Project for each Key Discipline, as applicable to the Project and completion and handover scope.

Table 1: Work Packages by Key Discipline and Phase

KEY DISCIPLINES	COMPLETION PHASE			
	CONSTRUCTION VERIFICATION	COMMISSIONING	PRACTICAL COMPLETION	DEFECTS LIABILITY PERIOD
Civil Works (Civil and Structures)	Installation Work Package	Commissioning Work Package	Handover Documentation Package	Amended Work Package as required*
Rail Corridor Works (Track)	Installation Work Package	Commissioning Work Package	Handover Documentation Package	Amended Work Package as required*
Rail System Works (Signalling and Electrical)	Installation Work Package	Commissioning Work Package	Handover Documentation Package	Amended Work Package as required*
Environment, Community, Sustainability and Heritage			Handover Documentation Package	Amended Work Package as required*

Note: (*) Indicates that only documents in the Handover Documentation Package requiring update during the Defects Liability Period shall be required to be resubmitted and not the entire Work Package.

2.4 Inspection Walkthrough Process

At the end of the Construction Verification phase the Project shall coordinate and conduct inspection walkthroughs in order to meet the requirements of this Specification.

The Project shall detail its inspection walkthrough process in the Completion and Handover Management Plan.

Inspection walkthroughs for a Key Discipline shall not proceed until:

- construction of the relevant Rail Infrastructure in the Key Discipline has been completed in accordance with the requirements of National, State and ARTC Reference Documents
- a notice advising of proposed inspection walkthrough has been issued by the Project to the ARTC Representative, with an inspection date of not less than 20 Business Days from the date of the Contractor's notice, or as specified in the Contract
- an approval to proceed has been issued in writing by the ARTC Representative.

Inspection walkthroughs shall be conducted jointly between the ARTC Representative and relevant ARTC Business Unit Representatives, the Project, Rail Operators and any other relevant persons or agencies as required by ARTC.

Any Defects identified during these inspections shall be recorded in accordance with:

- the ARTC Track and Civil Code of Practice Response Booklet (ETW-00-01)
- the ARTC Track and Civil Code of Practice Structure Inspection (ETE-09-01) and Structure Inspection Procedure (ETE-09-02)
- the ARTC Signals Technical Maintenance Plan (ESM-26-02) and Signals Service Schedule / Standard Jobs Work Instruction (ESW-26-01).

2.5 Defects Identification and Management

This Section 2.5 does not limit any other provision of the Project's Contract.

The Project shall list all Defects in a Defect List. The Defect List shall allow for the management of Defects throughout each of the phases listed in Figure 1 above, including the Defect Liability Period.

The Project shall provide to the ARTC Representative the Defect List in native format (EGP1001F-01) for uploading into the ARTC Asset Management System (Ellipse) as part of the Installation Work Package, Commissioning Work Package and Handover Documentation Package for each Key Discipline.

The Defect List shall provide as a minimum a summary of each Defect, including:

- relevant equipment identification
- location (start and end chainage, offset, etc)
- Defect details
- date Defect identified
- proposed and actual Defect rectification date
- responsible party, and
- status.

Defects recorded in the Defect List shall include all unresolved Non-conformance Reports (NCRs).

Defect items shall be classified and rectified as per the assessment and detailed in:

- the ARTC Track and Civil Code of Practice Response Booklet (ETW-00-01)
- the ARTC Track and Civil Code of Practice Structure Inspection (ETE-09-01) and Structure Inspection Procedure (ETE-09-02)
- the ARTC Signals Technical Maintenance Plan (ESM-26-02) and Signals Service Schedule / Standard Jobs Work Instruction (ESW-26-01).

2.6 Outstanding Works

Any outstanding works not completed at the end of the Commissioning phase shall be recorded in an Outstanding Works Register.

The Outstanding Works Register and Outstanding Works Plan and Schedule shall be submitted to the ARTC Representative for review and acceptance no later than 20 business days post Commissioning.

There may be circumstances where outstanding works shall be managed as a Defect. This shall be agreed by the ARTC Representative and managed in accordance with Section 2.5 of this Specification.

2.7 Deliverables

The Project shall provide the deliverables as outlined in Table 2: Completion and Handover Deliverables.

The Project shall provide deliverables, with all supporting documentation and evidence, through the Aconex platform.

Table 2: Completion and Handover Deliverables

DELIVERABLE	ACCEPTANCE CRITERIA	TIMING
Completion and Handover Management Plan	Review and acceptance of the Project's Completion and Handover Management Plan.	To be submitted by 60 Business Days post Award Date.
Draft Work Packages	ARTC Representative acceptance of use of the Project's Work Package templates: <ul style="list-style-type: none"> • Installation Work Package (per Key Discipline, as applicable) • Commissioning Work Package (per Key Discipline, as applicable) • Handover Documentation Package (per Key Discipline, as applicable). 	To be submitted by 60 Business Days post Award Date.

DELIVERABLE	ACCEPTANCE CRITERIA	TIMING
Installation Work Packages: <ul style="list-style-type: none"> • Civil Works (Civil and Structures) • Rail Corridor Works (Track) • Rail System Works (Signalling and Electrical) 	Review and acceptance of completed Installation Work Package (per Key Discipline, as applicable).	To be submitted no later than 20 Business Days prior to proposed Commissioning commencement date.
Commissioning Work Packages: <ul style="list-style-type: none"> • Civil Works (Civil and Structures) • Rail Corridor Works (Track) • Rail Systems Works (Signalling and Electrical) 	Review and acceptance of completed Commissioning Work Package and completed Post-Commissioning Work Package (per Key Discipline, as applicable).	To be submitted no later than 20 Business Days prior to proposed Commissioning commencement date.
Handover Documentation Packages: <ul style="list-style-type: none"> • Civil Works (Civil and Structures) • Rail Corridor Works (Track) • Rail Systems Works (Signalling and Electrical) 	Review and acceptance of completed Handover Documentation Package (per Key Discipline, as applicable).	To be submitted no later than 40 Business Days post Commissioning completion date and as a condition precedent to Practical Completion.
Handover Documentation Package <ul style="list-style-type: none"> • Environment, Community, Sustainability and Heritage 	Review and acceptance of completed Handover Documentation Package – Environment, Community, Sustainability and Heritage.	To be submitted no later than 40 Business Days post Commissioning completion date, or unless otherwise specified by the ARTC Representative.
Defect Liability Period	Review and acceptance of a Work Package, which includes documents in the Handover Documentation Package that have been updated during the Defect Liability Period.	When the Contractor submits its payment claim as per the relevant Contract Documentation.

3 Completion and Handover Management Plan

The Project shall prepare and submit a Completion and Handover Management Plan.

Without limiting the requirements of the Contract Documentation, the Completion and Handover Management Plan shall address the deliverables for the Key Disciplines and the requirements of this Specification.

The Completion and Handover Management Plan shall:

- include a detailed inspection procedure for the joint inspection of the Works, which must provide the ARTC Representative with sufficient time to properly carry out the inspection which is required to be undertaken under Section 2.4 of this Specification and to determine whether to release the Hold Point referred to in Section 2.2 of this Specification
- provide for a Defect Management Plan which fully addresses the requirements of Sections 2.5 and 8 of this Specification and any other matters the ARTC Representative requires.

In addition, the Completion and Handover Management Plan shall detail the following items, as applicable:

- completion strategy
- schedule for completion and handover activities
- key Contractor roles and responsibilities
- process for stakeholder engagement with the following stakeholders:
 - ARTC Representatives, including but not limited to:
 - Project Manager
 - Project Engineers – Discipline specific
 - Project Environment Manager
 - Project Sustainability Manager
 - ARTC Business Unit Representative, including but not limited to:
 - ARTC Corridor Environment Representative
 - ARTC Corporate Environment Manager
 - ARTC Corridor Manager
 - ARTC Area Manager
 - ARTC Signalling Engineers
 - ARTC Asset Planning Managers – Discipline specific
 - ARTC Service Delivery Manager
 - ARTC Train Control System Manager
 - ARTC Operations Manager.

- inspection walkthrough process, detailing the following as a minimum:
 - inspection scope
 - inspection discipline/s
 - inspection schedule
 - inspection battery limits/location
 - inspection attendees and their respective roles and responsibilities
 - inspection notification.
- defect identification and management, detailing the following as a minimum:
 - how Defects will be managed up to Practical Completion and throughout the Defect Liability Period
 - the process of identifying and classifying Defects
 - the process of recording and tracking identified Defects
 - the process of rectifying and closing out identified Defects
 - the process of communicating the tracking, rectification and close out of Defects with the ARTC Representative.
- notifications processes associated with compliance with this Specification
- provide Work Package templates for:
 - Installation Work Package (per Key Discipline, as applicable)
 - Commissioning Work Package (per Key Discipline, as applicable)
 - Handover Documentation Work Package (per Key Discipline, as applicable).
- management of the Defect Liability Period
- management of change and updates across phases.

4 Construction Verification Phase

The Construction Verification phase involves the validation and verification that the relevant part of the Rail Infrastructure in a Key Discipline has been constructed in accordance with the requirements of this Specification and National, State and ARTC Reference Documents, through the appropriate inspections and checks in preparation for the subsequent Commissioning phase.

The Project shall provide objective evidence to ARTC that clearly demonstrates that the relevant parts of the Rail Infrastructure in a Key Discipline comply with the Project Documents. The Project shall prepare and provide the Installation Work Package to the ARTC Representative.

The requirements listed in this section and detailed in the Installation Work Package templates referenced in *Appendix A – Installation Work Package* outlines the minimum requirements for each Key Discipline.

Each Key Discipline has its own specific deliverables to demonstrate the Project's compliance with this Specification and National, State and ARTC Reference Documents.

The Project shall provide in the Installation Work Package all relevant information to demonstrate that the construction of the relevant part of the Works in a Key Discipline has been completed in accordance with the requirements of this Specification and ARTC Reference Documentation. This shall include all relevant quality verification documents (including any supporting information).

The Project shall ensure all Defects (as described in Section 2.5 of this Specification) from the Construction Verification phase are rectified prior to commencement of the Commissioning phase and in accordance with the timeframes specified in:

- the ARTC Track and Civil Code of Practice Response Booklet (ETW-00-01)
- the ARTC Track and Civil Code of Practice Structure Inspection (ETE-09-01) and Structure Inspection Procedure (ETE-09-02)
- the ARTC Signals Technical Maintenance Plan (ESM-26-02) and Signals Service Schedule / Standard Jobs Work Instruction (ESW-26-01).

4.1 Civil and Structures requirements

The Project shall provide the following civil and structures requirements in accordance with this Specification:

- COR-FM-062 Installation Work Package – Civil and Structures
- Defect List.

4.2 Track requirements

The Project shall provide the following track requirements in accordance with this Specification:

- COR-FM-063 Installation Work Package - Track
- Defect List.

4.3 Signalling and Electrical requirements

The Project shall provide the following signalling and electrical requirements in accordance with this Specification:

- ESC-21-02 Inspection and Testing of Signalling – Plans, Programs, Documentation and Packages
- ESC-21-03 Inspection and Testing of Signalling – Inspection and Testing Principles
- ESC-21-04 Inspection and Testing of Signalling – Standard Forms
- ESC2104F-01 Inspection and Testing Plan
- ESC2104F-02 Minor Signalling Work Package
- ESC2104F-03 Installation Work Package
- Defect List.

5 Acceptance Phase

The Acceptance phase involves the validation of the Works and Project scope and requirements by the ARTC Representative prior to handover to the ARTC Network.

The Rail Infrastructure must be compliant and fit-for-purpose to be accepted for handover to the ARTC Network for asset ownership and maintenance and the safe and efficient operation of trains.

The ARTC Representative shall review, and if satisfactory accept the Projects quality verification documents, issued as part of the Construction Verification phase.

Objective evidence must be provided as part of the assurance process that clearly demonstrates the Rail Infrastructure has been constructed in accordance with the Project scope and requirements, and all relevant National, State and ARTC Reference Documents. This shall include:

- the traceability of project, business and system requirements identified in the Project documents
- all Quality documentation, including test and inspection procedures, lot reports, certificates, as commissioned and as built drawings as referenced in the Installation Works Package, Commissioning Works Package and Handover Documentation Package templates for each Key Discipline
- role competency validation assessments against the National and ARTC competency requirements
- the intent and integrity of the Project scope requirements has been maintained following any approved departures and waivers to ARTC Standards, Procedures and practices
- certification requirements achieved as specified in the Project Documents, this Specification and any other relevant ARTC Reference Documents
- evidence that the Rail Infrastructure supports the policies, processes, procedures and systems that make up ARTC's Safety Management System
- all operational readiness requirements have been delivered in preparation for commissioning and handover to the relevant ARTC Network.

6 Commissioning Phase

The Commissioning phase includes all planning and preparation activities, checks and functional tests necessary to demonstrate the Rail Infrastructure in a Key Discipline complies with National, State and ARTC Reference Documents and is operationally ready.

The Project shall prepare and provide the Commissioning Work Package to the ARTC Representative for each Key Discipline.

The requirements listed in this section and detailed in the Commissioning Work Package template in *Appendix B – Commissioning Work Packages* outlines the minimum requirements for each Key Discipline.

Each Key Discipline has its own specific deliverables to demonstrate the Project's compliance with this Specification and ARTC Reference Documents.

The Project shall ensure all Defects (as described in Section 2.5 of this Specification) are rectified prior to completion of the Commissioning phase in accordance with the timeframes specified in:

- the ARTC Track and Civil Code of Practice Response Booklet (ETW-00-01)
- the ARTC Track and Civil Code of Practice Structure Inspection (ETE-09-01) and Structure Inspection Procedure (ETE-09-02)
- the ARTC Signals Technical Maintenance Plan (ESM-26-02) and Signals Service Schedule / Standard Jobs Work Instruction (ESW-26-01).

6.1 Civil and Structures requirements

The Project shall provide the following civil and structures requirements in accordance with this Specification:

- COR-FM-064 Commissioning Work Package – Civil and Structures
- Commissioning Certificate
- Acceptance of Commissioning Work Package
- Defect List.

6.2 Track requirements

The Project shall provide the following track requirements in accordance with this Specification:

- COR-FM-065 Commissioning Work Package - Track
- Commissioning Certificate
- Acceptance of Commissioning Work Package
- Defect List.

6.3 Signalling and Electrical requirements

The Project shall provide the following signalling and electrical requirements in accordance with this Specification:

- ESC2104F-04 Commissioning Work Package
- OPE-FM-001 SAFE Notice
- Commissioning Certificate/s
- Acceptance of Commissioning Work Package
- Defect List.

7 Practical Completion

For the purpose of this Specification, Practical Completion is defined as the stage of the Works by the Project that are complete, except for minor Defects or any outstanding works which do not prevent the Works from being used for their stated purpose. Practical Completion includes the effective commissioning of a fully compliant, vertically integrated railway that permits the safe operations of trains.

Following successful completion of the commissioning of the completed Works, the Project shall prepare and submit to the ARTC Representative:

- a) a Notice of Conformance for the Works that includes a statement by the Contractor that "all of the Works have been completed in accordance with the Project Documents", duly signed by the Contractor Representative, and
- b) the Handover Documentation Package for each Key Discipline.

The requirements listed in this section and detailed in the Handover Documentation Package template in *Appendix C – Handover Documentation Packages* outline the minimum requirements for each Key Discipline.

The ARTC Certificate of Practical Completion (Contractor) Form (EGP2001T-13) shall be completed by the Project to certify that the scope of Project works has successfully been commissioned.

Each Key Discipline has its own specific deliverables to demonstrate the Projects compliance with its obligations under this Specification and National, State and ARTC Reference Documents.

In accordance with this Specification, the Project shall ensure that only Defects as described in the following ARTC Standards are remaining to be rectified at the end of commissioning:

- Track and Civil Code of Practice Response Booklet (ETW-00-01)
- Track and Civil Code of Practice Structure Inspection (ETE-09-01) and Structure Inspection Procedure (ETE-09-02)
- Signals Technical Maintenance Plan (ESM-26-02) and Signals Service Schedule / Standard Jobs Work Instruction (ESW-26-01).

The ARTC Representative shall within 20 Business Days notify the Project whether it believes the Handover Documentation Package complies with the requirements of this Specification.

If the ARTC Representative notifies the Project that the Handover Documentation Package does not comply with the requirements of this Specification, the Project shall rectify and reissue the Handover Documentation Package after which the process in this section shall reapply.

Once the ARTC Representative notifies the Project of its acceptance of the Handover Documentation Package for each Key Discipline, Practical Completion of the Works can be triggered in accordance with this Specification and the Defect Liability Period then commences.

7.1 Civil and Structures requirements

The Project shall provide the following requirements in accordance with this Specification:

- COR-FM-066 Handover Documentation Package – Civil and Structures
- Defect List.

7.2 Track requirements

The Project shall provide the following requirements in accordance with this Specification:

- COR-FM-067 Handover Documentation Package - Track
- Defect List.

7.3 Signalling and Electrical requirements

The Project shall provide the following requirements in accordance with this Specification:

- ESC2104F-05 Handover Documentation Package
- Defect List.

7.4 Environment, Community, Sustainability and Heritage requirements

The Project shall provide the following requirements in accordance with this Specification:

- COR-FM-068 Handover Documentation Package – Environment, Community, Sustainability and Heritage.

The Project shall provide supporting documentation and evidence in accordance with COR-FM-068 through SAI360 or Aconex platforms, where applicable. Aconex transmittals must be used in conjunction with SAI360 until SAI360 is fully implemented by the ARTC Interstate Network.

The Project must provide all complaints and stakeholder engagement registers and information in Consultation Manager.

All monitoring equipment conditionally required or committed to in technical reports must be installed prior to operations regardless of whether it is consented or not, unless otherwise formally agreed on by ARTC.

7.5 Other Completion and Handover requirements

In addition to the above, the Project shall also provide the following requirements in accordance with this Specification:

- EGP2001T-13 Certificate of Practical Completion (Contractor).

8 Defect Liability Period Phase

Once Practical Completion of the Works has been achieved, the Defect Liability Period will commence in accordance with this Specification and the Contract.

The Project shall manage Defects identified during the Defect Liability Period through the ARTC Asset Management System (Ellipse) and in accordance with:

- the ARTC Track and Civil Code of Practice Response Booklet (ETW-00-01)
- the ARTC Track and Civil Code of Practice Structure Inspection (ETE-09-01) and Structure Inspection Procedure (ETE-09-02)
- the ARTC Signals Technical Maintenance Plan (ESM-26-02) and Signals Service Schedule / Standard Jobs Work Instruction (ESW-26-01).

All Defects identified are to be recorded using the ARTC Track & Civil, Structures and Signals Inspection/Defects Found Report Form (EGP1001F-01) for uploading and managing in Ellipse.

The Project shall expediently rectify:

- all Defects remaining from the Commissioning phase
- all outstanding works remaining from the Commissioning phase and
- all other Defects that manifest during the Defect Liability Period.

The Project shall give written notice to the ARTC Representative of the rectification of each Defect immediately upon completion, providing the details described in Section 2.5.

The Project shall provide a Work Package, which includes documents in the Handover Documentation Package that have been updated during the Defect Liability Period.

Appendices

Appendix A – Installation Work Package

A.1 Installation Work Package – Civil and Structures

COR-FM-062 Installation Work Package – Civil and Structures

A.2 Installation Work Package - Track

COR-FM-063 Installation Work Package – Track

A.3 Installation Works Package – Signalling and Electrical

ESC2104F-03 Installation Work Package – Signalling

Appendix B – Commissioning Work Packages

B.1 Commissioning Work Package – Civil and Structures

COR-FM-064 Commissioning Work Package – Civil and Structures

B.2 Commissioning Work Package - Track

COR-FM-065 Commissioning Work Package – Track

B.3 Commissioning Works Package - Signalling and Electrical

ESC2104F-04 Commissioning Work Package – Signalling

Appendix C – Handover Documentation Packages**C.1 Handover Documentation Package - Civil and Structures**

COR-FM-066 Handover Documentation Package – Civil and Structures

C.2 Handover Documentation Package - Track

COR-FM-067 Handover Documentation Package – Track

C.3 Handover Documentation Package - Signalling and Electrical

ESC2104F-05 Handover Documentation Package – Signalling

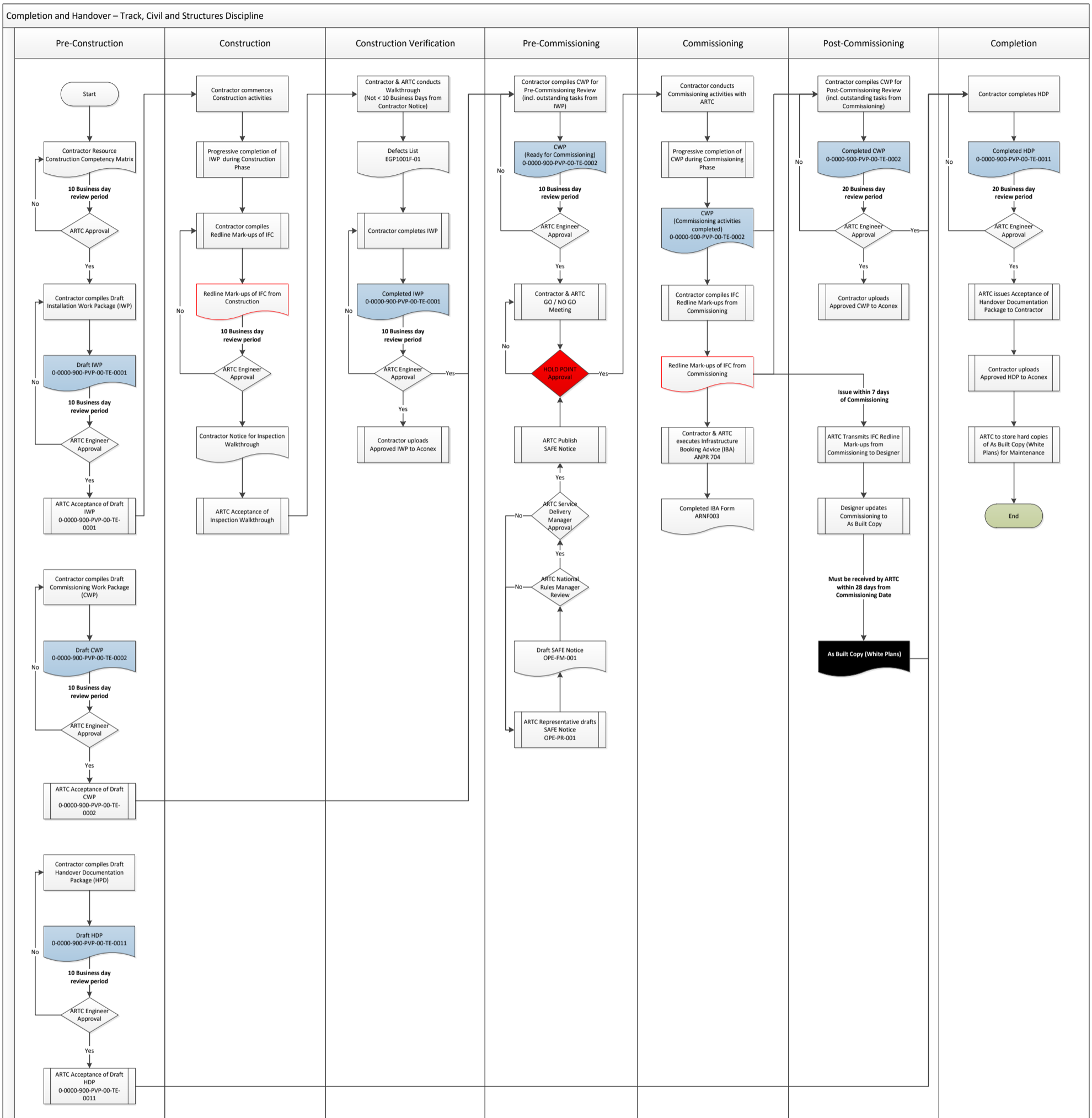
C.4 Handover Documentation Package - Environmental, Community, Sustainability and Heritage

COR-FM-068 Handover Documentation Package – Environment, Community, Sustainability and Heritage

Appendix D – Key Discipline Completion and Handover Process Charts

D.1 Completion and Handover Process – Track, Civil and Structures

The Project shall follow the Completion and Handover Process set out below for all track, civil and structure disciplines.



D.2 Completion and Handover Process – Signalling and Electrical

