Commissioning Work Package –Civil and Structures

COR-FM-064

Applicability

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| --- | --- | --- | --- | --- |
| ARTC Network Wide |  |  |  |  |
| SMS |  |  |  |  |

Publication Requirement

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| --- | --- | --- |
| Internal / External |  |  |

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# Glossary

Specific terms and acronyms used throughout this document are listed and described in the table below.

|  |  |  |
| --- | --- | --- |
| Term | acronym | Definition |
| Project | “Project” | For the purpose of this Works Package, the following are considered to be representatives of the Project:   * Designer / Service Delivery Contractor * Construction Contractor * Environmental Representative. |
| ARTC Representative | “ARTC Representative” | For the purpose of this Works Package, the ARTC Representative is the Project Manager or Senior Project Manager. |
| Issued for Construction | IFC | IFC Drawings |

# Introduction

The Commissioning Work Package template shall be used by the Project to record the minimum requirements needed to meet the Commissioning Phase requirements.

The use of this Commissioning Work Package template applies to all ARTC Projects, including Projects being delivered as part of the Inland Rail Program.

The Commissioning Work Package template is designed to be scalable and tailorable to meet the delivery strategy and completion and handover requirements for individual Projects.

Where documentation has been issued as an Aconex Transmittal, this can be referenced via the tables within this Work Package and include the Aconex Transmittal Number and a description of the purpose and content of the transmittal.

For all details pertaining to this document and the requirements, refer to the Completion and Handover Specification (COR-SP-001).

## Authorisation of Commissioning Work Package

The section below outlines the acknowledgement from the ARTC Representative that this Work Package is accepted.

The Project shall provide all information referenced and ensure it meets the requirements of the Completion and Handover Specification (COR-SP-001).

Table 1 - Authorisation of Commissioning Work Package

|  |  |
| --- | --- |
| Project: |  |
| Stage: |  |
| Work Package No: |  |
| This Work Package is approved by: |  |
| Position: |  |
| Signature: |  |
| Date: |  |

# Commissioning Work Package Requirements

The Project shall provide all supporting documentation per the requirements below.

All listed documentation and requirements apply to the civil and structures disciplines.

All commissioning documents shall be accepted by the ARTC Representative prior to any commissioning activities commencing.

## Register of Scope of Commissioning Works

The Project shall provide all scope documentation relating to civil and structures commissioning activities which are defined by the Project.

Additional scope documentation issued separately to the Project must be listed in the table below.

Table 2 - Scope of Commissioning Works

|  |  |  |
| --- | --- | --- |
| Document NUmber | Rev | Description |
| Example:  02-2601-010-012 | **0** | **PSR Scope A – Narrabri to North Start (N2NS) Project** |
| Example:  IR2600-GCOR-007378 | **-** | **Formal transmittal of N2NS scope documentation issued to Contractor on 31/10/2020.** |
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## Register of Safe Working Forms and Permits

The Project shall provide all safe working forms and permits associated with commissioning activities. ARTC Safe Working forms are available at the following link: <https://www.artc.com.au/customers/operations/rules-procedures/nsw/safe-working-forms/>

Table 3 - Safe Working Forms and Permits

|  |  |  |  |
| --- | --- | --- | --- |
| Lot Number | Description | Status | Date Works Closed |
| ANRF003 | **Infrastructure Booking Advice** | **Approved** | **31/10/2021** |
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## Register of Commissioning Program

The Project shall provide its Commissioning Program and / or Schedule for the commissioning of civil and structure Works.

Table 4 - Commissioning Program

|  |  |  |
| --- | --- | --- |
| Document NUmber | Rev | Description |
| Example:  05-2600-010-001 | **0** | **N2NS Stage 1 Penney’s Rd [625.000km] to Tapscott Rd [658.000km] Commissioning Schedule – 18-19/10/2021** |
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## Register of Commissioning Notices

The Project shall list and provide all commissioning notices associated with the civil and structure Works.

Table 5 - Commissioning Notices

|  |  |  |
| --- | --- | --- |
| Document NUmber | Rev | Description |
| Example:  05-2600-010-001 | **0** | **N2NS Stage 1 Penney’s Rd [625.000km] to Tapscott Rd [658.000km] Commissioning Notice 1 - 17/10/2021** |
| Example:  IR2600-GCOR-007378 | **-** | **Formal transmittal of N2NS Stage 1 Penney’s Rd [625.000km] to Tapscott Rd [658.000km] Commissioning Notices issued.** |
|  |  |  |
|  |  |  |
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## Register of Commissioning Inspection and Test Plan

The Project shall list and provide all Commissioning Inspection and Test Plans associated with the civil and structure Works.

Table 6 - Commissioning Inspection and Test Plan

|  |  |  |
| --- | --- | --- |
| Document NUmber | Rev | Description |
| Example:  260-RG-ITP-0001 | **0** | **Commissioning Inspection and Test Plan Register – Formation** |
| Example:  IR2600-GCOR-007378 | **-** | **Formal transmittal of Commissioning Inspection and Test Plans for Formation Construction Works for N2NS 625.00 km – 630.500 km.** |
|  |  |  |
|  |  |  |
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## Register of Commissioning Work Instruction

The Project shall list and provide all executed Commissioning Work Instructions for the civil and structure Works for ARTC Representative acceptance.

Table 7 - Commissioning Work Instructions

|  |  |  |
| --- | --- | --- |
| Prepared Commissioning Work Instructions No. | Status | Description |
| Example:  05-2600-010-001 | **Issued for Use** | **N2NS Stage 1 Penney’s Rd [625.000km] to Tapscott Rd [658.000km] Civil and Structures Commissioning Work Instruction** |
|  |  |  |
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## Register of Commissioning Meetings

The Project shall list and provide details of Commissioning Meetings, including agendas and minutes.

Table 8 – Commissioning Meetings

|  |  |  |
| --- | --- | --- |
| Commissioning Meetings No. | Status | Description |
| Example:  05-2600-010-001 | **Issued for Information** | **N2NS Stage 1 Penney’s Rd [625.000km] to Tapscott Rd [658.000km] Commissioning Meeting 1 - Agenda - 1/10/2021** |
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## Register of Commissioning Risk Assessments

The Project shall provide a list of all Commissioning Risk Assessments relating to civil and structure Works and identify any outstanding risks proposed to be transferred to ARTC or another Project.

Any outstanding risks shall be accepted by the ARTC Representative.

Table 9 - Commissioning Risk Assessments

|  |  |  |
| --- | --- | --- |
| Document NUmber | Rev | Description |
| Example:  3-0001-240-POS-00-RG-001 | **0** | **Risk Assessment Register – Civil and Structure Commissioning** |
| Example:  IR2600-GCOR-007378 | **0** | **Formal transmittal of all Risk Assessments conducted during Civil and Structure Commissioning for N2NS Penney’s Rd [625.000km] to Tapscott Rd [658.000km] – 18-19/10/2021** |
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## Register of Installation Work Package

The Project shall list the relevant accepted Installation Work Package/s for civil and structure Works.

Table 10 - Installation Work Package

|  |  |  |
| --- | --- | --- |
| Document NUmber | Rev | Description |
| Example:  5-0018-260-CTP-00-DR-0001 | **0** | **Narrabri to North Star | Stage 1 – Installation Work Packages** |
| Example:  IR2600-GCOR-007378 | **-** | **Formal transmittal of Installation Work Packages accepted for N2NS.** |
|  |  |  |
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## Register of Assets

The Project shall provide a list of all civil and structure assets that form part of the commissioning activities.

Any changed, altered or new assets are to be marked up on the issued IFC Asset List in accordance with ARTC’s requirements and submitted to the ARTC Representative via an Aconex transmittal.

Table 11 - Asset List

|  |  |  |
| --- | --- | --- |
| Document NUmber | Rev | Description |
| Example:  3-0001-260-PEN-00-RG-0009 | **0.2** | **Updated IFC Asset List containing assets changed during construction, and from the IFC Asset List issued on the 28/1082021.** |
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## Register of Defects

The Project shall provide the Defect List.

The Project shall ensure the Defect List meets the requirements specified in Section 2.5 of the Completion and Handover Specification (COR-SP-001).

Any Defects identified or closed out during commissioning are to be recorded.

Table 12 - Defects List

|  |  |  |
| --- | --- | --- |
| Document NUmber | Rev | Description |
| Example:  260-RG-QDS | **0.1** | **Master Defect Register – Commissioning – Civil and Structures** |
|  |  |  |
|  |  |  |
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## Register of Calibration Records

The Project shall list and provide all calibration records and certificates. This is to include all records and certificates from any works provider, either directly employed or sub-contracted and includes such records as mobile flash butt welding equipment, tampers and other track plant and equipment, laboratories and testing facilities.

Table 13 - Calibration Records

|  |  |  |  |
| --- | --- | --- | --- |
| Serial No. | Calibration Date | Equipment Description | Owner |
|  |  |  |  |
|  |  |  |  |
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## Register of Non-Conformances

The Project shall list and provide details of all non-conformances.

Any Non-Conformance Reports that are not closed at the time of commissioning are to be identified and provided with justification at time of submission.

Table 14 - Non-Conformances (NCRs)

|  |  |  |
| --- | --- | --- |
| NCR No. | Status | Description |
| Example:  260-RG-QDS | **Issued at Commissioning** | **Non-Conformance Register – Commissioning – Civil and Structures** |
|  |  |  |
|  |  |  |
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## Register of Commissioning Test Certificates

The Project shall list and provide all Commissioning Test Certificates.

Table 15 - Commissioning Test Certificates

|  |  |  |
| --- | --- | --- |
| Commissioning Test Certificate No. | Date of Issue | Description |
| Example:  260-RG-ITP-0001 | **28/10/2021** | **Test Certificates Register – Civil and Structures** |
| Example:  IR2600-GCOR-007378 | **28/10/2021** | **Formal transmittal of Test Certificates for Civil and Structures Commissioning N2NS Penney’s Rd [625.000km] to Tapscott Rd [658.000km].** |
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## Register of Commissioning Redline Mark Up Drawings

The Project shall list and provide all Redline Mark-up Drawings for civil and structures Works developed during commissioning activities.

Table 16 - Commissioning Redline Mark-up Drawings

|  |  |  |
| --- | --- | --- |
| Drawing No. | Rev | Description |
| Example:  02-2601-010-012 | **0.1** | **Track Alignment – Narrabri North to Moree General Arrangement**  **616.650 km to 621.150 km** |
| Example:  IR2600-GCOR-007378 | **-** | **Formal transmittal of N2NS Redline Mark-ups on IFC Drawings issued by Contractor at Commissioning.** |
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## Register of Commissioning Logs

The Project shall list and provide details of all commissioning logs, including any outstanding commissioning logs.

Table 17 - Commissioning Log

|  |  |  |
| --- | --- | --- |
| Commissioning Log No. | Date of Issue | Description |
| Example:  260-RG-COMLOG0-01 | **28/10/2021** | **Civil and Structure Commissioning Log - N2NS Penney’s Rd [625.000km] to Tapscott Rd [658.000km]** |
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## Register of Attendance Logs

The Project shall list and provide attendance logs relating to commissioning activities of civil and structure Works.

Table 18 - Attendance Logs

|  |  |  |
| --- | --- | --- |
| Attendance Logs | Date of Issue | Description |
| Example:  260-RG-COMLOG-02 | **28/10/2021** | **Civil and Structure Commissioning Attendance Log - N2NS Penney’s Rd [625.000km] to Tapscott Rd [658.000km]** |
|  |  |  |
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## Register of Transmittals

The Project shall provide a list of all transmittals relating to commissioning activities.

Table 19 - Transmittals

|  |  |  |
| --- | --- | --- |
| Transmittals No. | Date of Issue | Description |
| Example:  260-RG-TRNS-0001 | **28/10/2021** | **Transmittal Register – Civil and Structures Commissioning** |
|  |  |  |
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## Register of Memorandum of Document Exchange

The Project shall list and provide copies of any memorandum of document exchanges relating to commissioning activities.

Table 20 - Memorandum of Document Exchange

|  |  |  |
| --- | --- | --- |
| Memorandum of Document Exchange | Date of Issue | Description |
| Example:  260-RG-MoD-0001 | **28/10/2021** | **Memorandum of Document Exchange Register – Civil and Structures Commissioning** |
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