

COAA EPC Contract Philosophy

COAA EPC Contract Committee, March 2005

1. Introduction

The COAA EPC Contract Committee has developed a standard form EPC Contract for use in industrial projects. This EPC Contract is intended to serve as a base document and can be modified by the parties with respect to a specific project. Where possible, definitions used in the COAA Stipulated Price Contract (2003) have been incorporated in this EPC Contract in an effort to standardise terms. This EPC Contract should be considered to be an industry benchmark and a document that can be modified on a project-specific basis.

The Committee has tried to use plain language and avoid legalese. In addition, the defined terms have been italicised throughout the document so that readers are made aware that a term has a specific meaning.

Since the EPC Contract is intended to be shared with and used by members of the COAA, there is no copyright in this document and members are encouraged to use the EPC Contract as a basis for industrial work.

The Committee recognized that there are considerable differences between lump sum and cost reimbursable contracts. However, the goal was to draft a contract with the flexibility of different types of compensation for the *Contractor*. This flexibility has been achieved by referencing an *Appendix* that may be drafted to provide for compensation based on a lump sum, unit rate, cost reimbursable basis, or a combination of compensation terms.

To make the EPC Contract as flexible as possible, the Committee has tried to make project-specific criterion fit into the *Appendices* which can be attached on a project-by-project basis. In addition, there are a number of blanks left in the document that can be completed on a project-by-project basis. These blanks are primarily in relation to identifying specific notice periods or insurance coverage amounts.

2. Appendices

As noted above, the *Appendices* are designed to make this contract flexible to many users and among projects for each user. The following points are suggestions for the contents of some of the *Appendices*:

- Appendix A – Owner’s Requirements
 - Scope of the *Work*
 - *Systems* (components) to be identified
 - Design Basis Memoranda
 - Validation of the *Owner’s* data, if necessary
 - *Commissioning before Functional Completion*
 - *Commissioning after Functional Completion*
 - *Inspection and Test Plan*

- *Performance Guarantees*
- *Performance Tests*
- Operation and Maintenance Manuals requirements
- Payment for *Procurement Services*
- Materials, Services and Equipment provided by *Owner*
- *Owner’s Specified Materials & Subcontractors*
- Designation of “prime contractor” for the purposes of the OH&S Act
- Requirements for the preparation of a safety management plan
- Communication Protocol and Coordination Procedures
- Reporting requirements
- *Specified Substances*, if any
- *Milestones*
- *Owner’s Requirements* for delivery, storage and handling of *Goods* on-site

Appendix B – Compensation

- Cash Flow Schedule

Appendix G – Forms

- Key Personnel Confidentiality, Proprietary Information and Consent Agreement
- Change Order
- Change Directive
- Functional Completion Notice
- Final Completion Notice
- Release and Certificate of Final Payment
- Statutory Declaration

The Committee has provided drafts of the following *Appendices* which may be used, or not, as the need arises:

Appendix D – Warranty Items Procedure

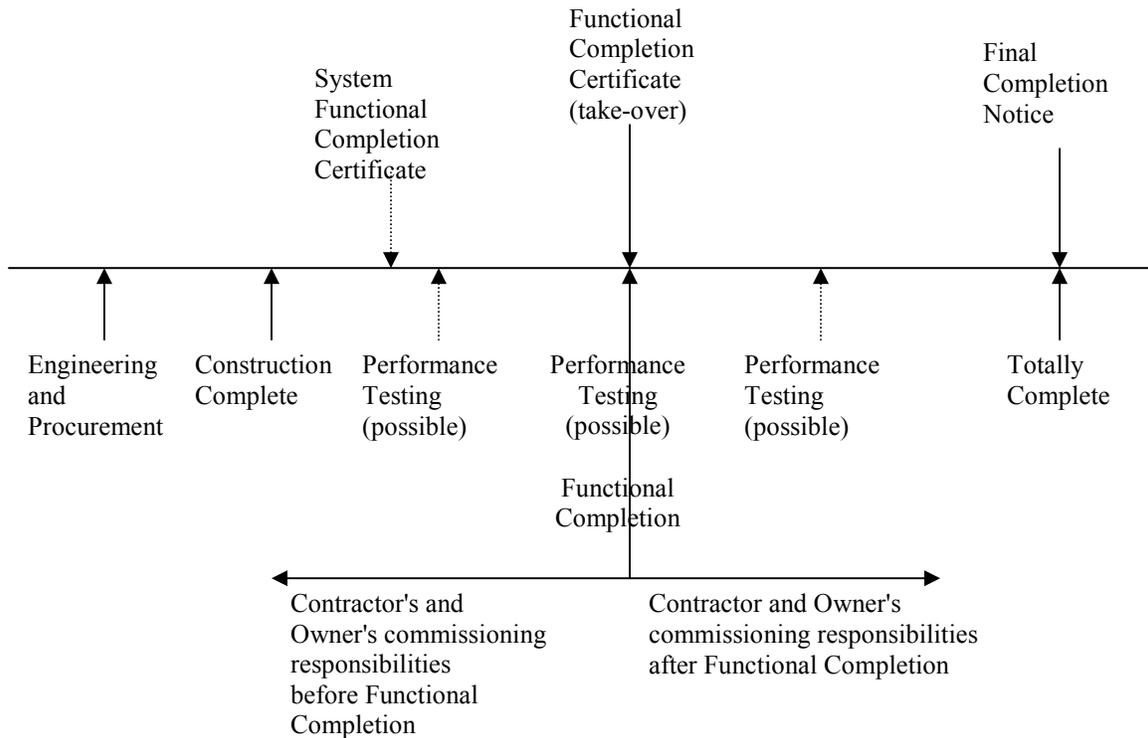
Appendix G – Forms

- Key Personnel Confidentiality, Proprietary Information and Consent Agreement
- Release and Certificate of Final Payment
- Statutory Declaration

Appendix H – Dispute Resolution Procedure

3. Key Milestones

The Committee looked at the key *Milestones* that would be incorporated into the EPC Contract. The relevant *Milestones* are dependant on the plans for each project and the particular *Owner* requirements; however, the *Milestones* in the following chart were chosen by the Committee in an effort to provide certainty and flexibility in the *Contract*:



4. Procurement

Given that in some projects procurement is provided by the *Contractor* as agent and in other projects procurement is performed by the *Contractor* for the *Contractor's* own account (this also typically follows whether the *Contractor* is paid on a cost reimbursable basis or lump sum basis), this EPC Contract incorporates both concepts.

5. Owner Specified Material and Subcontractors

The *Contractor* must review and determine whether or not the *Owner's Specified Material and Subcontractors* are acceptable for the *Work*. If the *Contractor* determines they are not acceptable, then the *Owner* must be notified and the *Owner* remains liable for the *Owner's Specified Material and Subcontractors*. If the *Owner's Specified Material and Subcontractors* are accepted by the *Contractor*, then the *Contractor* is liable for the *Owner's Specified Material and Subcontractors*, just as it is for any other material or equipment procured by the *Contractor*.

6. Functional Completion

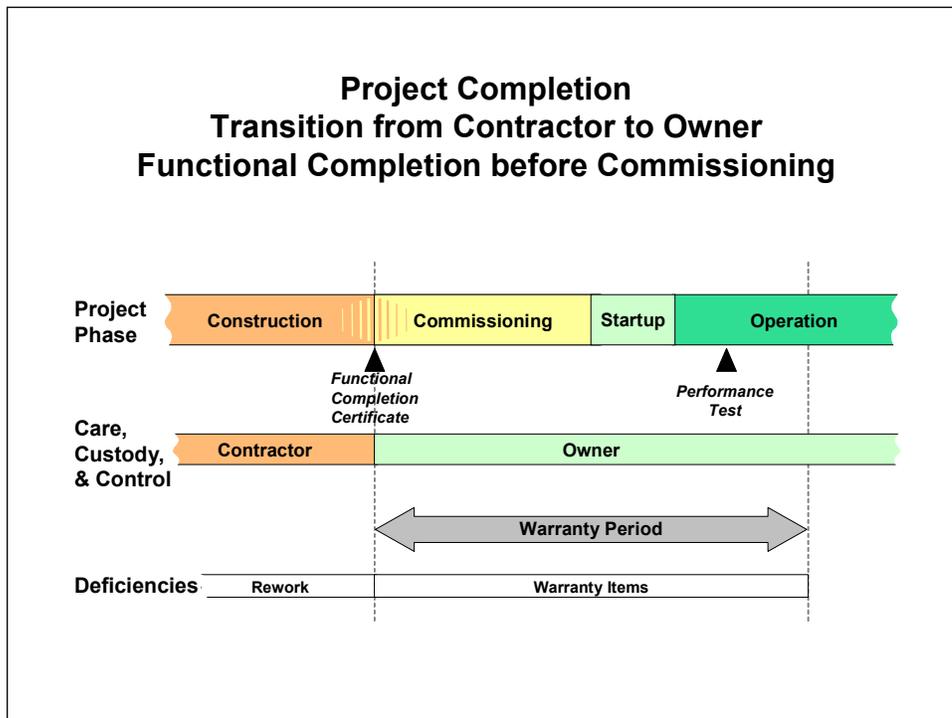
The *Functional Completion Certificate* is issued when the *Owner* takes over the *Work* and, as of the date in the *Functional Completion Certificate*, the care, custody, and control of the *Work* is handed from the *Contractor* to the *Owner*. This point also triggers the commencement of the *Warranty Period*.

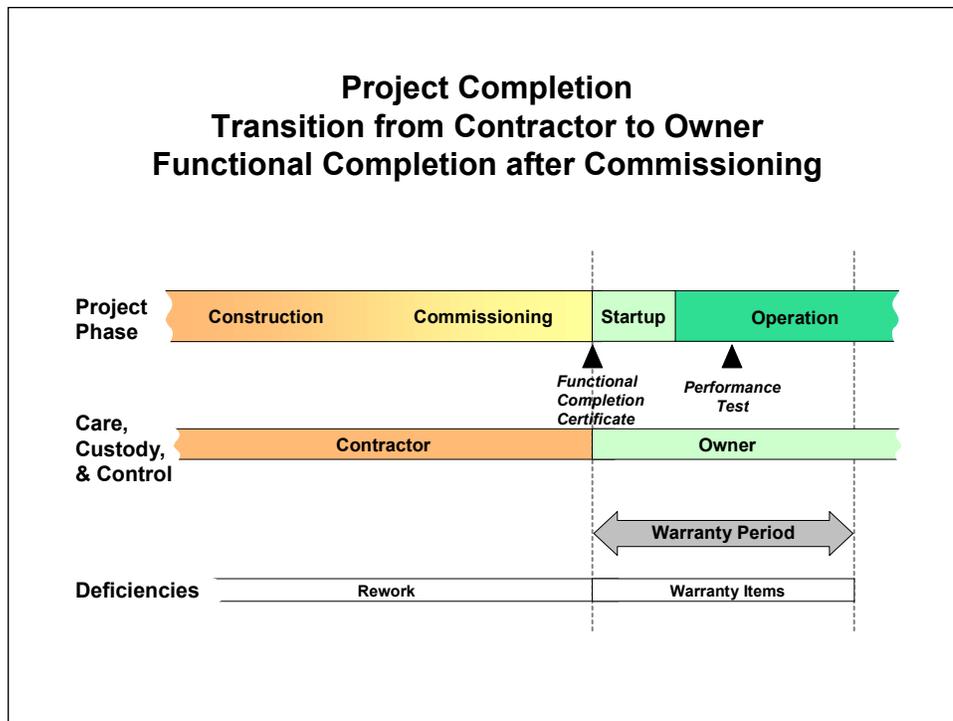
The EPC Contract contemplates that a *Functional Completion Certificate* may be issued for either a *System* or the entire *Work*.

7. Management of the transition from Construction to Operation

The steps from construction through commissioning and start-up to operation can be challenging because the *Owner* takes over control of the *Work* and yet *Deficiencies* are still being recorded. It is anticipated that the *Owner* may begin to modify the *Work* upon possession, without the consent, or even the knowledge, of the *Contractor*.

Deficiencies identified prior to issuance of a *Functional Completion Certificate* must be rectified by the *Contractor*, whereas after issuance of a *Functional Completion Certificate*, a defect must first be attributed to the *Contractor's* performance before it can be categorised as a *Warranty Item*.





8. Appendix D – Warranty Items Procedure

Because of the wide variety of methods for dealing with the management of *Warranty Items*, an *Appendix* has been created where the parties can attach a project specific procedure for the management of *Warranty Items*.

Rather than provide a detailed procedure that may not be applicable to each project, a flow chart is contained in the *Appendix* which describes a procedure for the management of *Warranty Items*. This flow chart is meant to be a discussion point for parties entering into the EPC Contract and can be modified for different project requirements, or written out as a procedure. It is recommended that the detailed procedure specify a time limit whenever one party must give notice to the other party.

The underlying premises of the flow chart are:

- The *Owner* has taken possession of the facilities and now has the task and the incentive to achieve an effective start-up.
- The *Owner* and the *Contractor* will maintain open and prompt lines of communication on *Warranty Item* matters, however the *Owner's* operations and maintenance personnel will take whatever actions are necessary to succeed in the startup, which may include modifying the facilities as necessary, whether the *Contractor* has provided input or not.
- During commissioning and startup, it often becomes necessary to act first and settle the accounting later. The rate at which issues arise and require resolution can easily exceed the rate at which the two parties are able to respond with mutually agreeable settlements.

9. Pre-Commissioning and Commissioning

The Committee recognized that there are a variety of definitions that are used in the industry for “pre-commissioning” and “commissioning”. Rather than try to define something that can be owner and industry specific, the Committee differentiated the commissioning responsibilities by determining when those responsibilities take place. Therefore the commissioning responsibilities are set out as the responsibilities of both the *Contractor* and the *Owner* before and then after the issuance of the *Functional Completion Certificate*.

10. Liability and Indemnity and Insurance

The objectives of the allocation of risk in the COAA EPC Contract are as follows:

- avoiding conflict (providing wrap-up insurance);
- avoiding premium duplication; and
- covering all risks.

Since deductions are project and party specific, deductibles in relation to *Contractor* and *Subcontractor* obtained insurance are to be approved by the *Owner*.

With regard to deductibles it was agreed that rather than going forward on a fault basis (which requires investigation and root cause analysis to determine fault), it would be preferable to avoid conflict between the parties and therefore deductibles should be covered by the party most able to, but not necessarily who can, control the risk. Therefore it was agreed by the majority of the Committee that the deductibles would be covered as follows:

- *Contractor's* auto - to be covered by the *Contractor*;
- *Contractor's* owned equipment - to be covered by *Contractor*;
- *Contractor's* leased equipment - to be covered by the *Owner*;
- damage to the *Owner's* property - to be covered by the *Owner*;
- damage to the *Work* until a *Functional Completion Certificate* is issued (care, custody and control with *Contractor*) – to be covered by the *Contractor*; and
- damage to the *Work* after *Functional Completion Certificate* is issued (care, custody and control with *Owner*) – to be covered by the *Owner*.

With regard to the *Owner's* obligations for insurance, it was agreed that as the *Owner* is providing insurance for the benefit of the *Contractor*, the *Owner* should be under the same obligations to provide evidence of renewal and a 30 day notice of material change just as the *Contractor* is required to do.

The Committee recommends that the *Owner* provide copies of the insurance policies before requiring the *Contractor* to sign the EPC Contract. It was agreed that, since these actions will take place prior to the signing of the *Contract*, it is not appropriate to have the requirements in the *Contract*. However, it was recognized by the Committee that as the *Owner* is purchasing insurance for the benefit of the *Contractor*, and in order that the *Contractor* not purchase that insurance and duplicate the cost of premiums, that the *Contractor* ought to have the opportunity to satisfy itself that the insurance obtained is satisfactory for its needs.

11. Appendix H – Dispute Resolution Procedure

It was agreed by the Committee that the dispute resolution provisions would mirror those found in the COAA Stipulated Price Contract (2003).

The dispute resolution procedures have been placed in a separate schedule to make the *Contract* easier to be used by industry and the dispute resolution procedures can easily be replaced for company specific procedures as necessary.

12. Parent Guarantee

The Committee decided not to include a parent guarantee in this EPC Contract as such an obligation is project and party specific.