

A Sample Subcontractor Management Plan

1.0 INTRODUCTION

1.1 Identification

This is the Subcontractor Management Plan, document number XYZ035, for the SYSTEM Z project.

1.2 Purpose

The Subcontractor Management Plan outlines the relationship between the XYZ Contractors in the SYSTEM Z project and the methods by which Company ABC, as the prime contractor, will assure the production of quality deliverables from each of its subcontractors and assure the development of long term business relationships between the Companies.

1.3 Scope

This document is applicable to all phases of the SYSTEM Z project. Company ABC and all subcontractors to Company ABC will adhere to the approach outlined in this document.

1.4 Approach

The approach to managing the subcontractors is based on the following guiding principles:

- a) a Project Office will be established to effectively support the needs of the subcontractors,
- b) effective channels of communications will be clearly defined and established,
- c) a Statement of Work will be developed jointly by the team with each subcontractor taking responsibility for the deliverables and services outlined in its areas of responsibility,
- d) each subcontractor will have its responsibilities and authorities clearly defined in the Statement of Work,
- e) each subcontractor will have its deliverables identified and required content clearly specified in the Statement of Work,
- f) each subcontractor will have the services it is responsible for providing clearly identified and described in the Statement of Work,
- g) all constraints imposed on the subcontractor will be clearly identified in the Statement of Work, including schedule and budget constraints,
- h) each subcontractor will have requirements for quality clearly identified to it in the Statement of Work, including the requirement to allow independent quality inspections of materials and processes,
- i) all products and services provided by the subcontractor will be subject to the acceptance of Company ABC and XYZ,
- j) each subcontract will contain appropriate terms and conditions,
- k) adequate facilities will be provided to meet the needs of the subcontractors, and

l) the prime contractor will support subcontractors in processing invoices and payments, subject to the invoices being delivered to Company ABC in an acceptable format for consolidation and remittance to XYZ. To this end, Company ABC will establish format requirements for invoices.

2.0 ORGANIZATION

2.1 Contract Organization Chart

XYZ has entered into a business partnership with Company ABC, Subcontractor-A, Subcontractor-B and Subcontractor-C, to jointly plan, develop, implement and support an integrated solution for the future SYSTEM Z. XYZ has also let a contract with Subcontractor-D to provide Independent Verification and Validation services. These various terms will be used to refer to various groupings of corporations throughout this document:

Subcontractors

This grouping includes Subcontractor-A, Subcontractor-B, and Subcontractor-C.

XYZ Partners

This group includes the Subcontractors plus Company ABC, the prime contractor.

XYZ Team

This group includes the XYZ Partners plus XYZ, the customer.

The major elements that comprise the SYSTEM Z project are presented in 2.0. These functional elements are mapped to the individual corporate elements in Section 2.2.

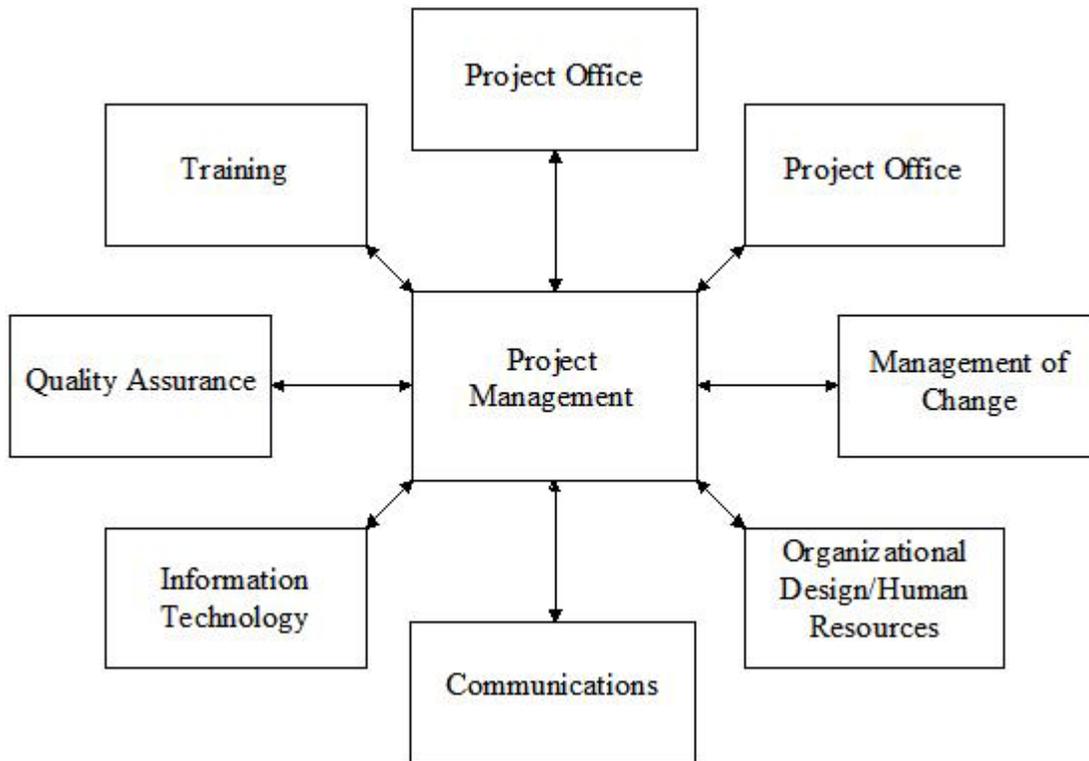


Figure 1 - Elements of the SYSTEM Z Project.

2.2 Roles and Responsibilities

At a high-level, Table 1 shows the mapping of SYSTEM Z functional elements to the XYZ Team (plus the IV&V contractor).

Functional Element	Corporation					
	XYZ	Company ABC	Sub A	Sub B	Sub C	Sub D
Project Management	X	X				
Project Office (Support)	X	X				
Business Process Re-engineering	X		X		X	
Management of Change			X			
Organizational Design/Human Resources			X			
Communications				X		

Functional Element	Corporation					
	XYZ	Company ABC	Sub A	Sub B	Sub C	Sub D
Information Technology	X	X				
Training	X	X				
Quality Assurance		X				
Independent Verification and Validation						X

Table 1 - Mapping of Functional Elements to Corporations.

2.2.1 XYZ Roles and Responsibilities

In this particular business partnership, the customer organization assumes overall management of the project. XYZ provides the Project Director, Mr. John Smith, who oversees the project and represents XYZ in negotiations and product reviews. Other XYZ employees participate in the project as members of the team defining required functionality, designing and developing the automated portions of the SYSTEM Z solution, and providing administrative support. XYZ personnel conduct training sessions for users of the SYSTEM Z. XYZ reviews and approves project products.

2.2.2 Company ABC Roles and Responsibilities

Company ABC is the prime contractor for the SYSTEM Z project. They are responsible for four major functional elements of the SYSTEM Z project:

- a. day-to-day project management including subcontract management,
- b. information technology,
- c. training, and
- d. quality assurance.

Project Management. The Company ABC team has overall responsibility for coordinating the day-to-day efforts of the XYZ Partners. To this end, Company ABC provides senior and intermediate management staff. They also provide project support services through the Project Office.

Information Technology. Company ABC is responsible for the computer-based solution for SYSTEM Z. This responsibility includes:

- a) analysis of the current technical environment,
- b) analysis of business requirements relevant to the application architecture,
- c) architecture definition,

- d) hardware platform selection and procurement,
- e) system software selection and procurement,
- f) application software requirements analysis,
- g) application software design,
- h) application software development,
- i) application software testing,
- j) system level integration and testing,
- k) provision of a software development facility, and
- l) software version control.

Training. Company ABC is responsible for training needs analysis, development of training strategies and plans, development or procurement of training courseware, and coordination of the training courses. The actual provision of training will be a shared responsibility with XYZ.

Quality Assurance. Company ABC provides the project discipline functions through the Quality Assurance organization. These functions include:

- a) providing quality assurance and quality control services,
- b) providing configuration management services,
- c) providing risk management services, and
- d) coordinating the establishment of project standards and procedures.

2.2.3 Subcontractor-A Roles and Responsibilities

Subcontractor-A provides a large percentage of the early efforts on the SYSTEM Z project. As the project progresses from defining the requirements through construction and implementation, the efforts of Subcontractor-A will be refocused. There are three principal areas of responsibility for Subcontractor-A:

- a) business process re-engineering,
- b) management of change, and
- c) organizational design and human resources.

Business Process Re-engineering. Subcontractor-A is responsible for assessing the basic business of XYZ. They identify the core processes that define that business. They will then analyze the core processes and make recommendations for how significant improvements in productivity can be realized.

Management of Change. Subcontractor-A will coordinate the actions necessary to help assure that XYZ is ready, in all respects, to accept, commit to and use the new approach to their business. This does not include the direct responsibility for training, which was discussed above.

Organizational Design/Human Resources. Subcontractor-A is also responsible for developing organizational and human resource elements of the solution recommended by the Business

Process Re-engineering. Any impacts on XYZ's organizational structure and skill levels of staff resulting from the recommendations will be identified.

2.2.4 Subcontractor-B Roles and Responsibilities

Subcontractor-B is responsible for communications from the SYSTEM Z project to other XYZ personnel and stakeholders. The purpose of this level of communication is to keep stakeholders and interested parties informed on key decisions made and progress to date.

2.2.5 Subcontractor-C Roles and Responsibilities

Subcontractor-C personnel will provide the skills and expertise to globally implement and support the SYSTEM Z solution.

2.2.6 Subcontractor-D Roles and Responsibilities

Subcontractor-D provides Independent Verification and Validation services to XYZ under separate contract. Subcontractor-D personnel review deliverables provided by the XYZ Partners to XYZ. They provide observations and comments on the deliverables to XYZ.

3.0 METHODS FOR SUCCESSFUL SUBCONTRACTOR MANAGEMENT

3.1 Management Practices

Successful projects that involve subcontractors all exhibit similar characteristics.

- a) They all have clear and unambiguous subcontracts established that include a Statement of Work.
- b) The efforts of all subcontractors are integrated into a cohesive project plan with all subcontractors understanding where their efforts fit into the overall picture.
- c) The formal and informal interfaces between the prime contractor and the subcontractors, as well as among the subcontractors, are documented.
- d) Before starting specific work, the subcontractors are granted authorization to proceed. This authorization is given, in writing, via a Work Authorization form.
- e) A formal team building process is established and implemented.

These practices all contribute to reducing the risk of misunderstandings or isolationism.

3.1.1 Establishing Clear, Unambiguous Subcontracts

Each subcontractor will have a legally binding, written contract that defines the following items.

- a) The legal names of the parties involved in the contract will be specified.
- b) The scope of the contracted work (contained in an attached Statement of Work), will be described in terms of:
 1. the responsibilities and authorities of each party to the contract,

2. a clear definition of the deliverables and minimum content to be provided by the subcontractor,
 3. a clear definition of the services to be provided by the subcontractor,
 4. any and all constraints imposed on the subcontractor by the prime contractor, such as schedule constraints, budget constraints, specific tools to be used, and
 5. a clear statement of requirements for quality of deliverables and services including the requirement to allow independent quality inspections of materials and processes.
- c) Appropriate terms and conditions which will be imposed on both the prime contractor and the subcontractor will be identified.
 - d) The acceptance process will be clearly identified.

3.1.2 Work Effort Integration

The work of all subcontractors will be coordinated by the prime contractor to assure that the efforts of all parties are integrated into a cohesive whole through the processes of concurrent engineering and top-down project control. A Project Master Schedule will be developed that establishes schedule constraints and identifies contractual and significant internal milestones. Intermediate schedules will be established that clearly show key project interfaces and the interdependencies of the work efforts. Concurrent engineering meetings will be conducted on a regular basis to provide visibility into work being performed and provide an opportunity for discussion among the XYZ Partners.

3.1.3 Interfaces Between Prime Contractor and Subcontractors

Each subcontractor organization will have a single point of contact with the prime contractor for contractual matters. The subcontractors are expected to identify their own single point of contact for contractual matters. On a day-to-day basis, all subcontractor personnel will be free to interact with any prime contractor personnel as needed to fulfil the subcontract.

3.1.4 Interfaces Among the Subcontractors

Each subcontractor organization will identify the responsibilities and authorities of the SYSTEM Z project staff. This information will be published in a project contact sheet. Informal, mutually beneficial contact is encouraged. However, to avoid schedule slippage, the interdependencies of subcontractor efforts will be identified on the intermediate schedules described in Paragraph 3.1.2. These intermediate schedules will make the formal interfaces visible.

3.1.5 Work Authorization

Before starting to bill time against a Cost Account, the subcontractor must first receive a Work Authorization Form, duly signed by the Deputy Project Director. The Work Authorization Form will authorize the start of work, will identify the deliverable(s) of the Cost Account, will identify budget and schedule constraints, will identify the responsible manager, and will identify the reviewers and acceptors of the products or services. When the authorized work is complete, the Work Authorization Form will be closed, and the authorization withdrawn.

3.1.6 Formal Team Building

At various points during the SYSTEM Z project, formal team building exercises will be held. The participation of all SYSTEM Z assigned subcontractor resources will be mandatory. These sessions will be planned and scheduled to minimize the impact on subcontracted work.

3.2 Progress Reporting

The prime contractor must be kept aware of the overall progress of the project. This includes the progress of each subcontractor. The subcontractors will report progress at the Cost Account level on a weekly basis. Based on the information contained in the weekly Cost Account Level Progress Reports, the prime contractor will prepare a monthly progress report at the WBS level.

3.2.1 Weekly Cost Account Level Progress Reporting

Each week, the subcontractor organization will prepare and deliver to the SYSTEM Z Project Office a weekly progress report for each Cost Account for which an open Work Authorization Form exists. A single report may be produced provided the information for each Cost Account is clearly identified. The report is to be delivered by noon on Fridays. The report will identify:

- a) authorized work that was scheduled to be performed during the week (activities within the Cost Account),
- b) progress made against that authorized work presented as:
 1. a textual description of progress,
 2. a list of internal milestones attained,
 3. an accounting of the hours billed against that Cost Account by all subcontractor personnel, and
 4. an assessment of the time (in hours) remaining to complete the activities in the Cost Account (Estimate to Complete),
- c) a list of unplanned, but authorized work that was conducted, identifying the number of hours spent,
- d) authorized work that is scheduled to be performed during the next week, including any internal milestones expected to be reached, and
- e) a brief description of any problems encountered in performing the activities of the Cost Account or warnings of schedule slippage.

The weekly Cost Account Level Progress Reports will be reviewed by the prime contractor and the master project tracking system updated to reflect the progress. Variance reports will be provided to Cost Account Managers should the variance exceed the acceptable thresholds defined in the SYSTEM Z Standards and Procedures Manual, document XYZ003.

3.2.2 Monthly WBS Level Progress Reporting

Once a month, the prime contractor will prepare a WBS Level Progress Report for submission to XYZ. A copy will be provided to the subcontractors. This report will present the progress of WBS elements expressed as a percentage complete and an indication of whether the work is ahead of or behind schedule.

3.3 Review Practices

Clear points of visibility into the work that the subcontractors are doing is crucial to reducing the risk of inappropriate work being done resulting in unplanned, costly rework. These points of visibility are established at regular periodic intervals and at key project milestones.

3.3.1 Progress Reviews

On an as-needed basis, Company ABC may request an informal review of subcontractor progress. This would involve discussions with the subcontractor's Functional Manager (Team Leader) or the subcontractor's point of contact for contractual matters. These reviews will be held at the request of the Deputy Project Director. They will only be requested if cost or schedule variance exceeds the threshold identified in the SYSTEM Z Standards and Procedures Manual.

3.3.2 Contractor Issues Meetings

Every two weeks, the Deputy Project Director will meet with delegates of the subcontractor organizations to discuss issues of concern to either party. The subcontractor delegate is usually a senior or intermediate employee of the subcontractor who is not directly involved in the delivery of the SYSTEM Z products or services. These meetings exist to facilitate the project and to remove any roadblocks to success.

3.3.3 Milestone Reviews

At key contractual milestones, a formal review will be conducted to provide visibility into the direction of the project to all parties. Topics covered depend on the milestone but could include such items as:

- a) where we are in the overall project schedule,
- b) an overview presentation of the key points contained in the project deliverables that comprise that milestone,
- c) a briefing on the quality of work achieved to date,
- d) a briefing on the budget and schedule status with major variances clearly highlighted and plans for corrective action presented, and
- e) a briefing on the current configuration status (baseline status, status of approved baseline change requests, etc.).

4.0 ACCEPTANCE PROCESS

4.1 Acceptance by Company ABC

All products and services provided by the subcontractors will be subject to approval by Company ABC.

4.1.1 Quality Assurance Review

Company ABC Quality Assurance staff will review all subcontractor deliverables for adherence to content requirements and standards. Evaluation criteria used by the Quality Assurance staff

are published in the SYSTEM Z Quality Assurance Plan, document XYZ001. The evaluation report prepared by the Quality Assurance staff will identify any significant deficiencies that would preclude the acceptance of the deliverable. Each identified deficiency must be addressed to the satisfaction of the Quality Assurance staff. The Quality Assurance staff will indicate their satisfaction in writing to the Deputy Project Director.

4.1.2 Deliverable Acceptance Form

The subcontractor is to prepare a Deliverable Acceptance Form and submit it with the deliverable. When the deliverable is deemed to be acceptable by Company ABC (including Quality Assurance staff), the Deliverable Acceptance Form will be signed by the Deputy Project Director. The deliverable and the Deliverable Acceptance Form will be submitted to XYZ for final customer acceptance.

4.2 Acceptance by XYZ

All products and services provided by the subcontractors will be subject to approval by XYZ.

4.2.1 Customer Review

XYZ staff and IV&V staff will review project deliverables (including subcontractor deliverables). XYZ will coordinate review comments and identify any significant deficiencies that would preclude the acceptance of the deliverable. Identified deficiencies must be addressed to the satisfaction of XYZ.

4.2.2 Deliverable Acceptance Form

When the deliverable is deemed to be acceptable by XYZ, the Deliverable Acceptance Form will be signed by the Project Director or his delegate.

4.3 Invoices and Payments

Invoices from subcontractors to Company ABC must be presented in a format suitable for consolidation and submission to XYZ.

4.3.1 Format of Invoices

Subcontractor invoices must meet the format and content requirements for invoices as set out in the Terms and Conditions of the contract between Company ABC and the subcontractor.

4.3.2 Payment Authorization

Subcontractors will submit monthly invoices reflecting the hours worked on the SYSTEM Z project. If no deliverables were included in the efforts for that invoice period, the payment will proceed. If a deliverable is included in the invoice period, payment of that invoice will be subject to the acceptance of the deliverable product by both Company ABC and XYZ. When the Deliverable Acceptance Form has been signed by Deputy Project Director and the Project Director, payment of subcontractor invoices will be authorized.