



NAVAL
POSTGRADUATE
SCHOOL

The Case for the CMBOOK

Dr. Rene G. Rendon, CFCM, CPCM
Associate Professor
Naval Postgraduate School

The Nation's Premiere Defense Research University

Monterey, California
WWW.NPS.EDU

Introduction

- Contract Management is a knowledge-intensive profession.
- Build contract management knowledge base
 - By gaining experience (tacit knowledge).
 - Through training and educational courses (explicit knowledge).
- Validate knowledge by pursuing occupational certification (e.g., DAWIA and FAC-C) or professional certification (e.g., NCMA).
- Maintain currency through continuous learning.

CM Training

- Based on the laws, regulations, and public policies that govern federal contracting.
- FAI and DAU courses.
- FAR, DFARS, CPRGs, DoDI 5000.02.
- NCMA seminars and conferences.

CM Education

- Foundational theories that inform contract management principles and that we apply in our day to day practice.
- Focused on the principles of CM and applied in practice.
- We need to understand basic principles of CM before we can begin to learn how these principles are applied in any specific domain.

Certified Professional Contracts Manager Candidate's Workbook

"NCMA is the door to
professionalism.
Certification is the key."



Published by
The National Contract
Management Association

THE BODY OF KNOWLEDGE

Professional proficiency in contract management requires broad knowledge and a range of skills in the areas of:

1. Business management, particularly materials and operations management, industrial marketing, financial management and related accounting.
2. The economics of materials and operations management.
3. Cost and price analysis and negotiation techniques.
4. Legal and regulatory aspects of procurement and contracting.
5. Managerial planning, decision making, communication, and control.
6. Procurement and contracting policy and procedures.
7. Management information systems, and information and data analysis.

The Body of Knowledge does not relate merely to the tasks of federal government procurement and contracting to the government. It is intended to encompass the entire spectrum of commercial, industrial, governmental, and international procurement and contracting.

The key to professionalism lies in the application of this knowledge and skill to the tasks faced in the conduct and management of procurement and contracting activities. The 69 modules of the NCMA EDUCATION AND TRAINING PROGRAM STRUCTURE (attached) detail this body of professional knowledge. Individual outlines have been prepared for each of the modules.

At any given time, the NCMA EDUCATION AND TRAINING PROGRAM STRUCTURE serves as a definitive description of the elements making up the body of professional knowledge. Over time, these elements will be refined or changed to meet the needs of our ever growing and changing profession.

Revised January 7, 1985

Approved by NCMA Board of Directors
February 13, 1985

**Education and Training Program Structure (ETPS)
January 1985**

NCMA has developed this program structure under the guidance of Dr. Harry Page and based on questions asked over the years in the Certification examinations. The program structure represents NCMA's statement on the body of knowledge required to be a professional in contract management. It is intended to be a dynamic statement, subject to revision. All of the NCMA materials under development relate to this program structure. Comments are invited and should be sent to NCMA Education Department, 6728 Old McLean Village Drive, McLean, VA 22101.

Basic Tools and Functions



| Economics | Accounting & Finance | Materials & Operations | Commercial Law (UCC) |
|-------------------------|------------------------------|----------------------------------|------------------------|
| Macroeconomic Concepts | Cost Accounting Basics | Elements of Production | Elements of a Contract |
| Microeconomic Concepts | Cost Accounting Standards | Elements of Industrial Marketing | Terms & Conditions |
| Industrial Organization | Elements of Business Finance | Elements of Logistics | Agency |
| Labor Economics | Financial Reports | Elements of Inventory Management | Warranties |
| | Break-Even Analysis | Surplus & Excess Property | Unconscionability |
| | Make or Buy Analysis | Materials Management | Rescues & Remedies |

Contracts and Procurement

| Management | | | |
|---------------------------------------|-----------------------------|------------------------------------|--|
| Procurement Organization & Management | | | |
| The Procurement Process | | | |
| Statutory & Regulatory Foundation | | | |
| The Contracting Officer | | | |
| Pre-Award | | Post-Award | |
| Acquisition Planning | | Contract Administration | |
| Requirements Determination | Solicitations, Bids, Awards | Financial Management of Contracts | Changes |
| Contract Types | Source Selection | Quality Assurance | Terminations |
| General Contract Provisions | Source Development | Inspection Acceptance & Warranties | Claims, Disputes & Appeals |
| Standards & Specifications | Negotiating Strategies | Monitoring Contract Performance | Contract Closeout |
| Patents & Data Rights | Cost & Price Analysis | Contract Auditing | Acquisition Management Information Systems |

Special Topics and Considerations

| Special Topics | | Special Considerations |
|---------------------------------------|---|--|
| Budgeting for Procurement | Socio-Economic Objectives | Considerations in Architect & Engineer Contracting |
| Systems Acquisitions | Small & Minority Business Development | Considerations in Construction Contracting |
| Program/Project Management | Vendor's Management System Audit | Considerations in Services Contracting |
| Productivity | Subcontracting & Subcontract Management | Considerations in R&D Contracting |
| Automated Procurement | Commercial & Industrial Products | Considerations in ADP Contracting |
| Ethics, Conflict of Interest | Small Purchases | |
| Value Analysis | International Purchasing | |
| Safety, Reliability & Maintainability | Government Property | |

Key:
 Indicates completed module
 Indicates module to be completed

NATIONAL CONTRACT MANAGEMENT ASSOCIATION

Guide to the Contract Management Body of Knowledge (CMBOK)

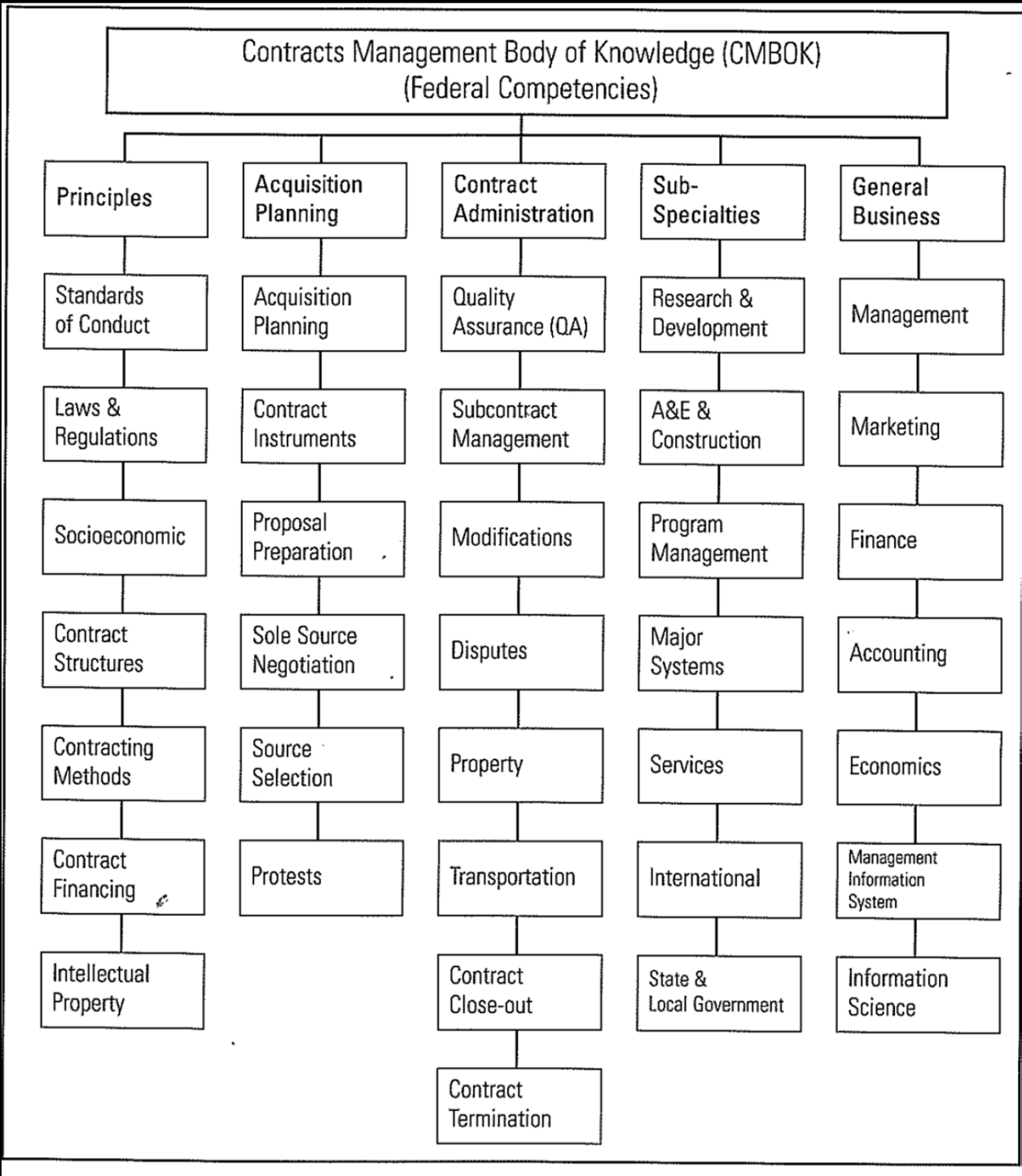
1st edition

Authors: David L. Bruce, CPCM; Marlys Norby, CPCM; and
Victor Ramos, CPCM, CFCM

September 2002



2002



NATIONAL CONTRACT MANAGEMENT ASSOCIATION

Guide to the
Contract Management
Body of Knowledge
(CMBOK)

2nd edition

Authors: Marlys Norby, Emmalyn Smith, and Ronald Smith

April 2004



2004

ANNOTATED GUIDE TO THE
**Contract Management
Body of Knowledge**
(CMBOK)



2ND EDITION

By Catherine Z. Remley and Robert A. Ludvik. Based on *Guide to the Contract Management Body of Knowledge*, 2004, by Mariys Norby, Emmalyn Smith, and Ronald Smith.

2006

CONTRACT MANAGEMENT BODY OF KNOWLEDGE (CMBOK)

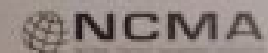
3rd Edition

National Contract Management Association

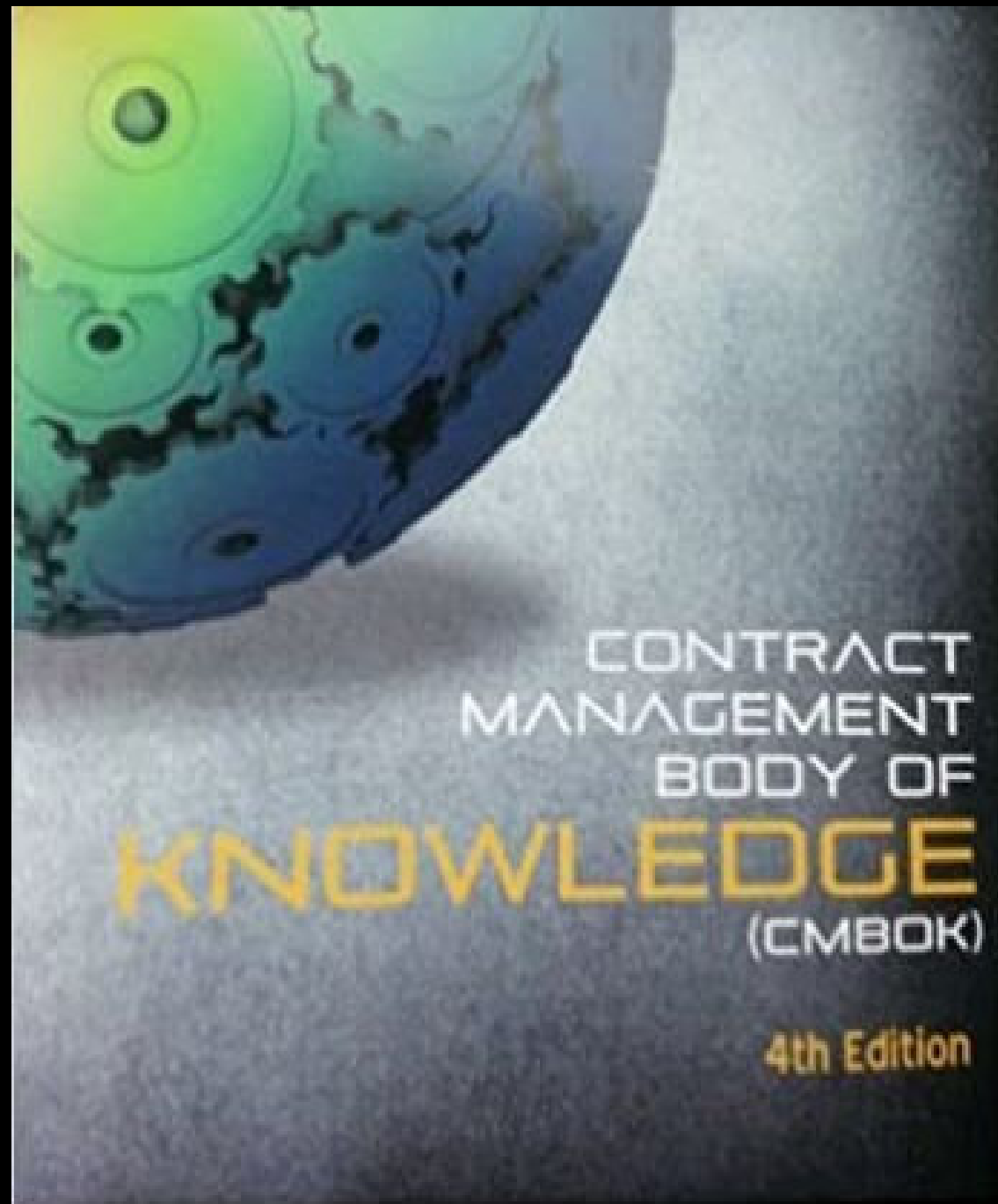
Based on the Guide to the
Contract Management
Body of Knowledge, 2004.

By Marisa Morby,
Cynthia Smith, and
Kevin Smith



 NCMA

2011



2013

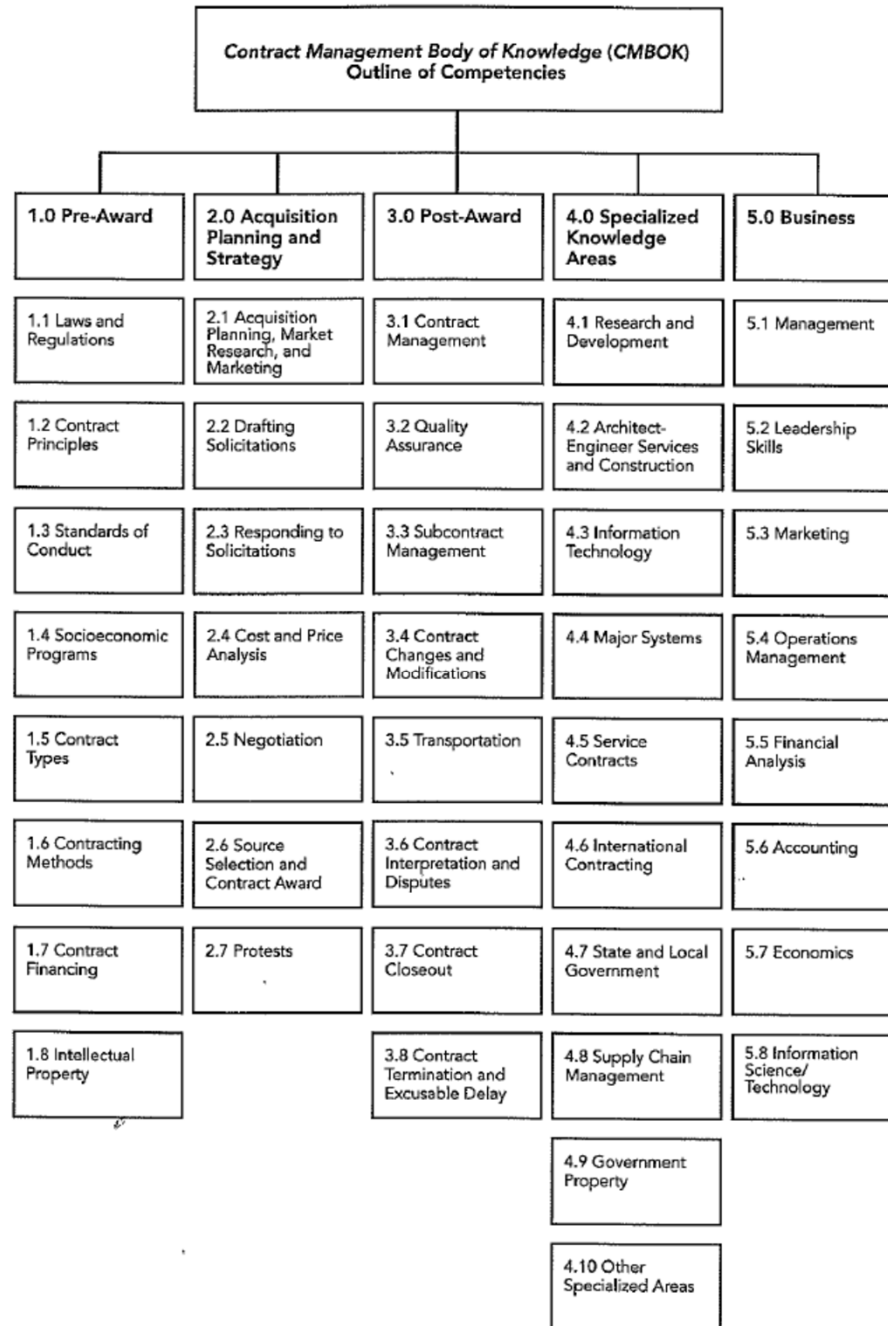


FIGURE 3. CMBOK Outline of Competencies

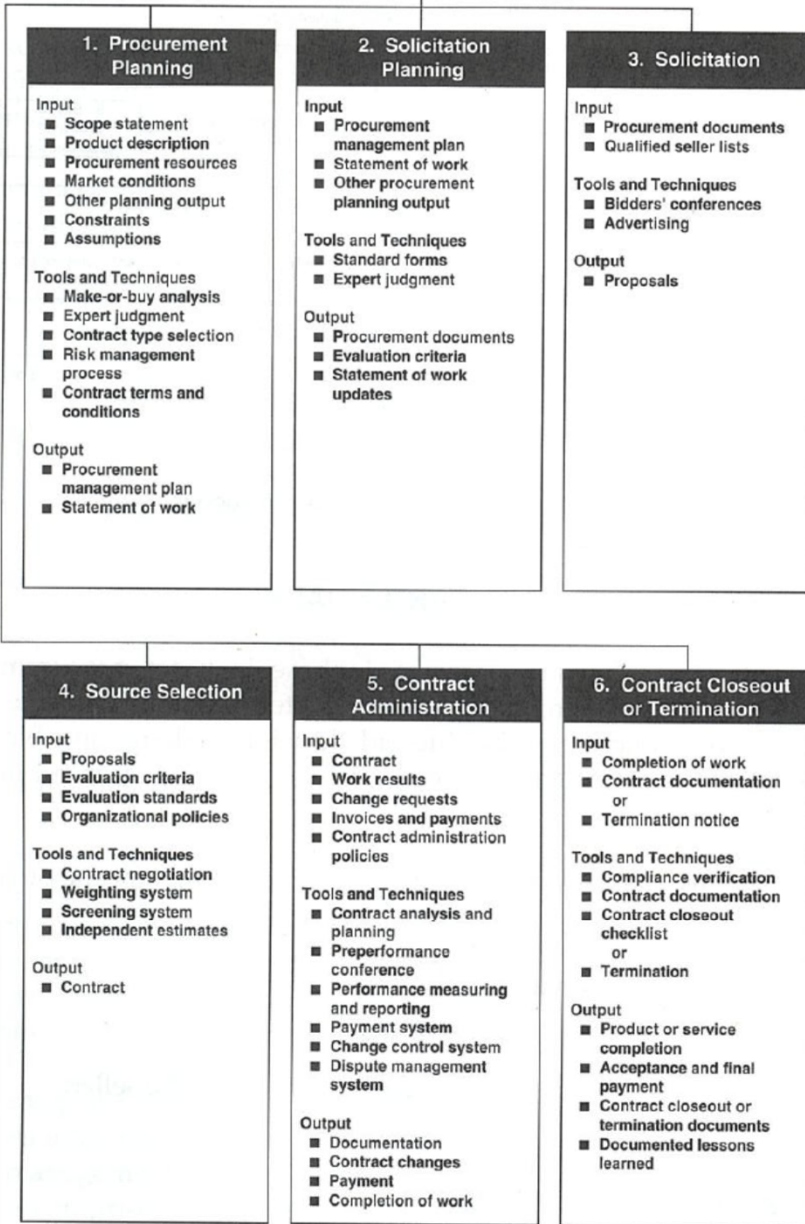
World-Class Contracting

100+ Best Practices for Building
Successful Business Relationships

Gregory A. Garrett

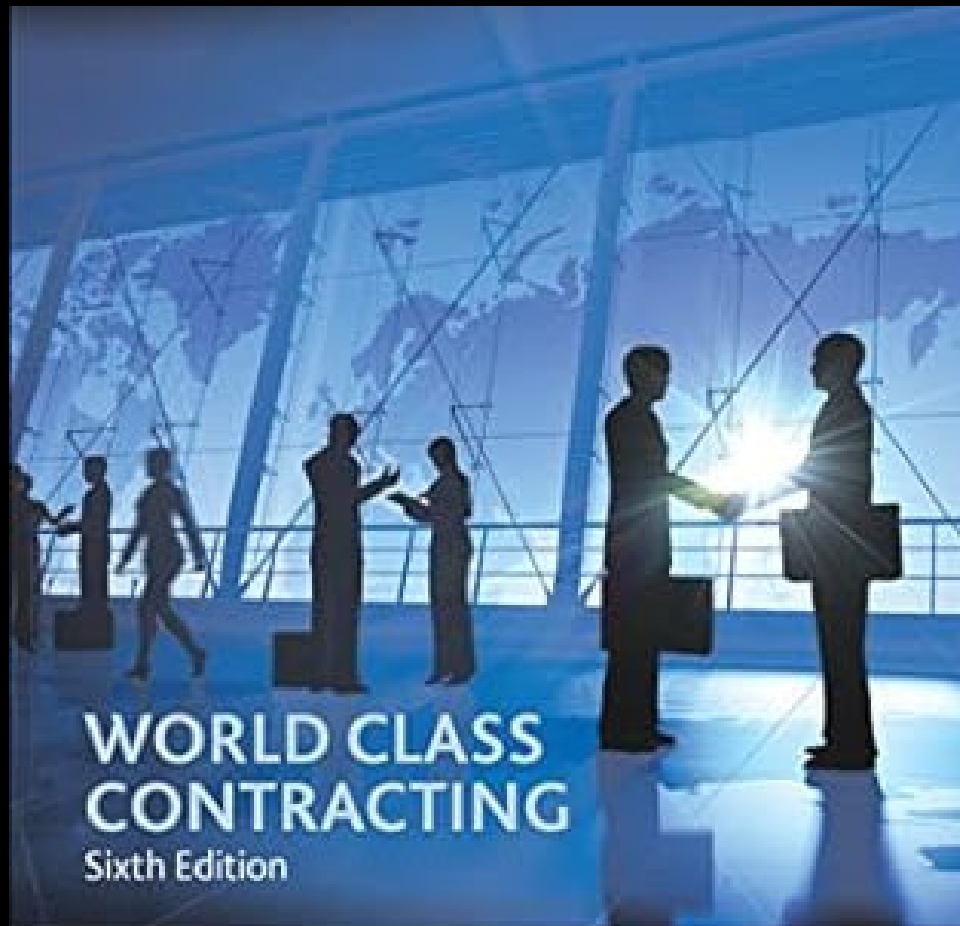
1997

Contract Management (Buyer)



Contract Management (Seller)

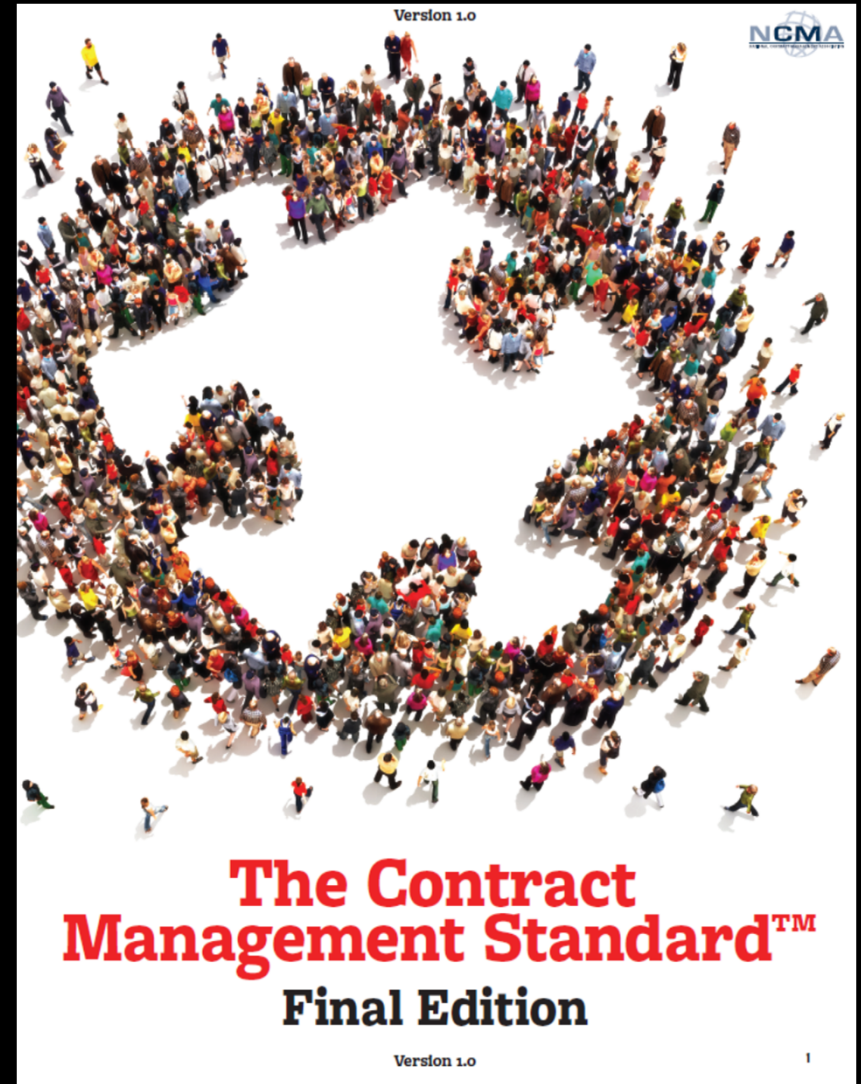
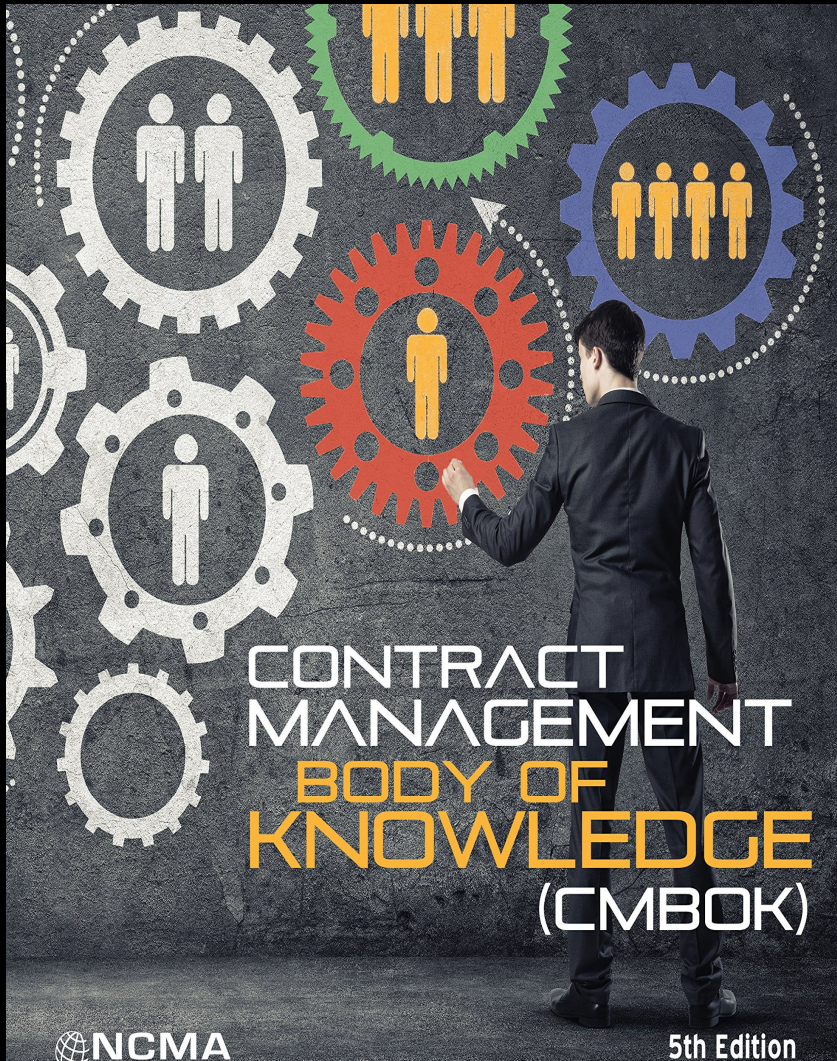




Gregory A. Garrett

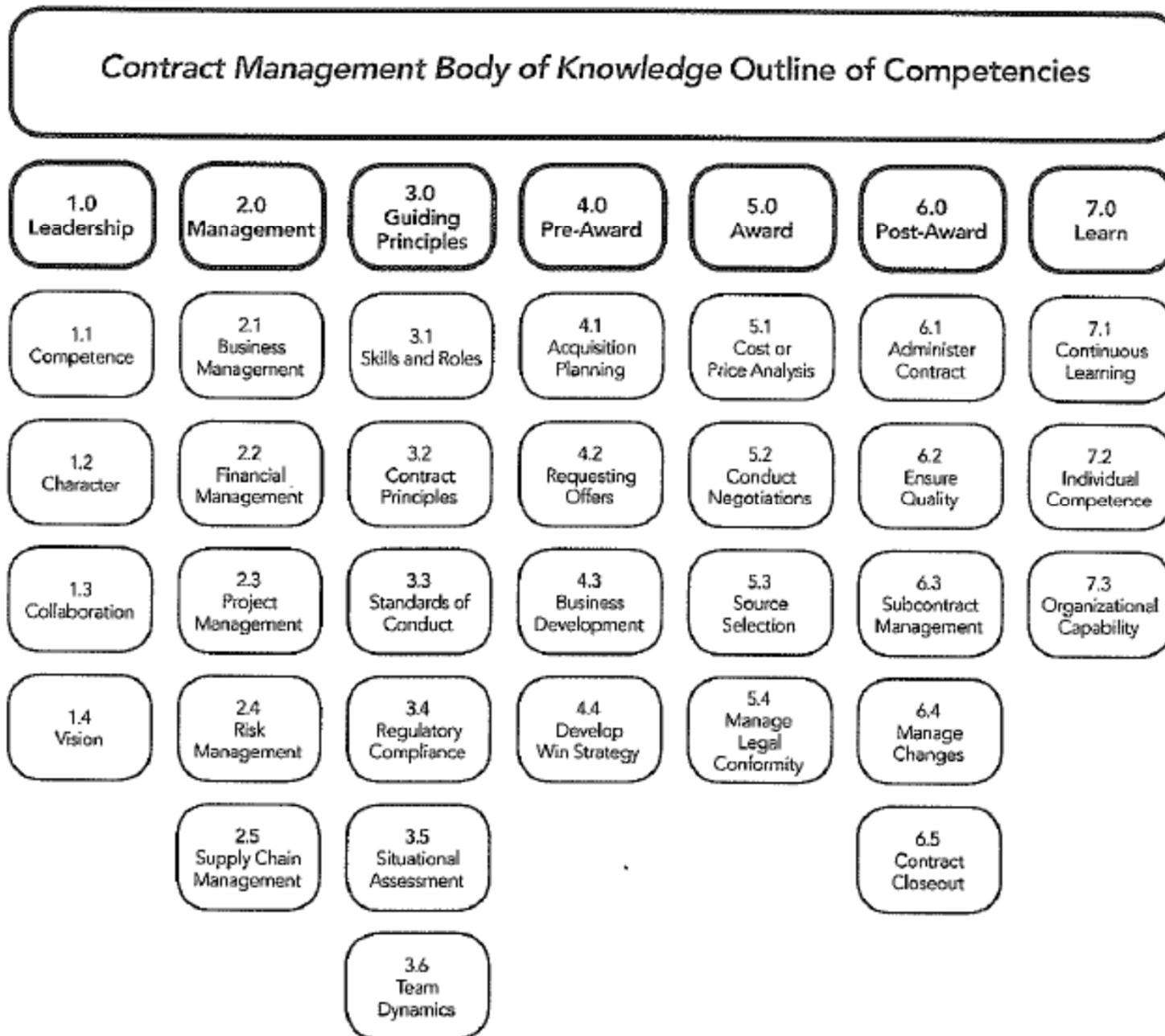
 Wolters Kluwer

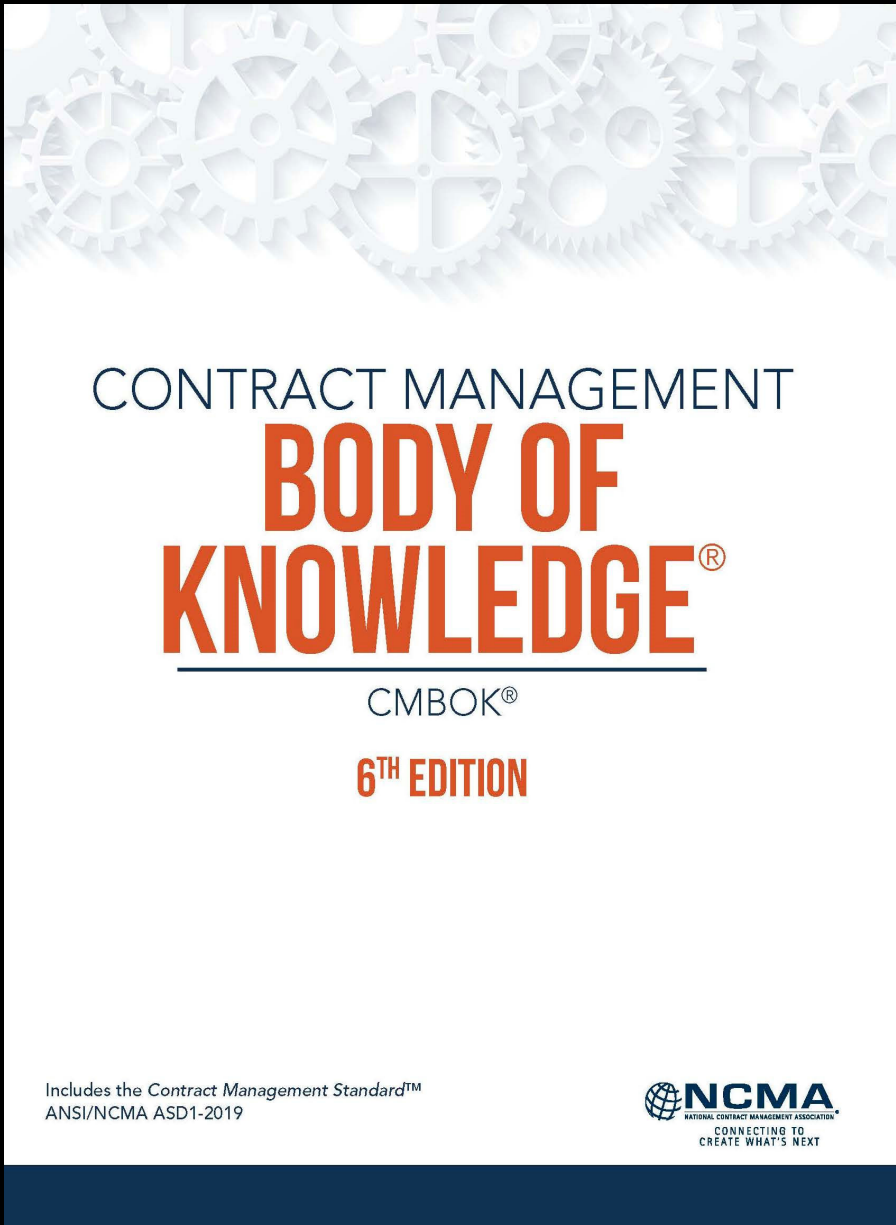
2015



2017

FIGURE 2-2. CMBOK Outline of Competencies





CONTRACT MANAGEMENT
BODY OF KNOWLEDGE[®]

CMBOK[®]

6TH EDITION

Includes the *Contract Management Standard*[™]
ANSI/NCMA ASD1-2019



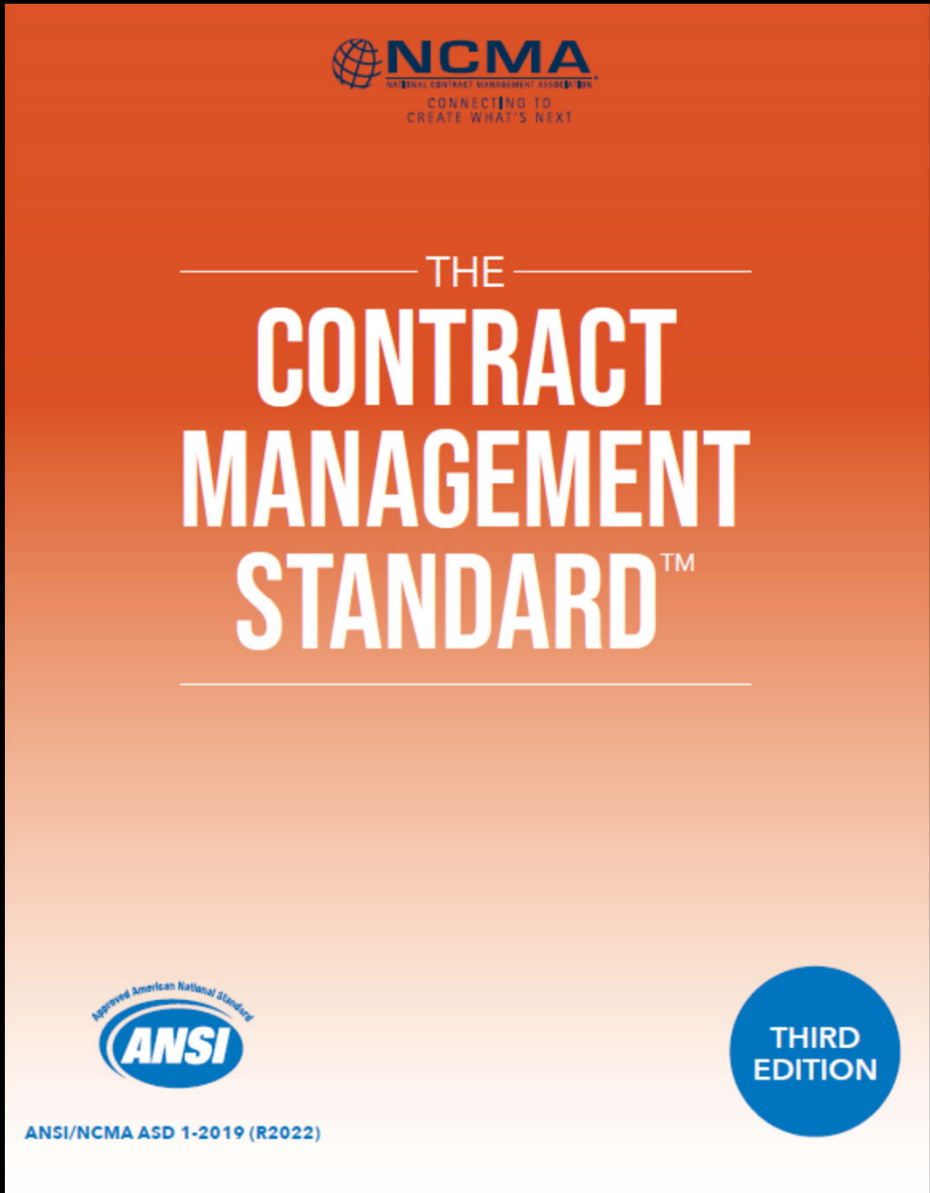
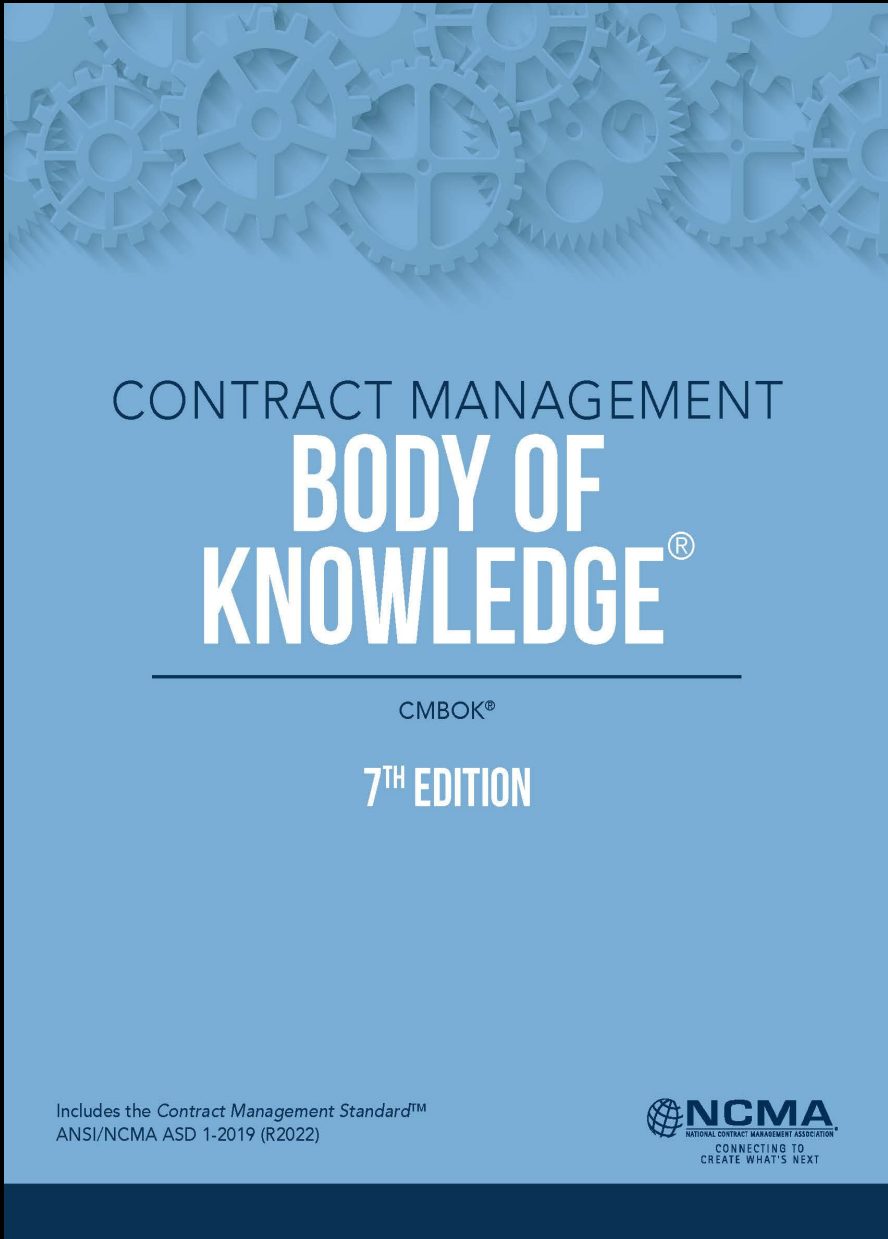
THE
CONTRACT MANAGEMENT STANDARD[™]
PUBLICATION

SECOND EDITION



ANSI/NCMA ASD 1-2019

2019



2022

Contract Management Standard Structure

The processes used to produce the expected contract management outcomes of the domains.

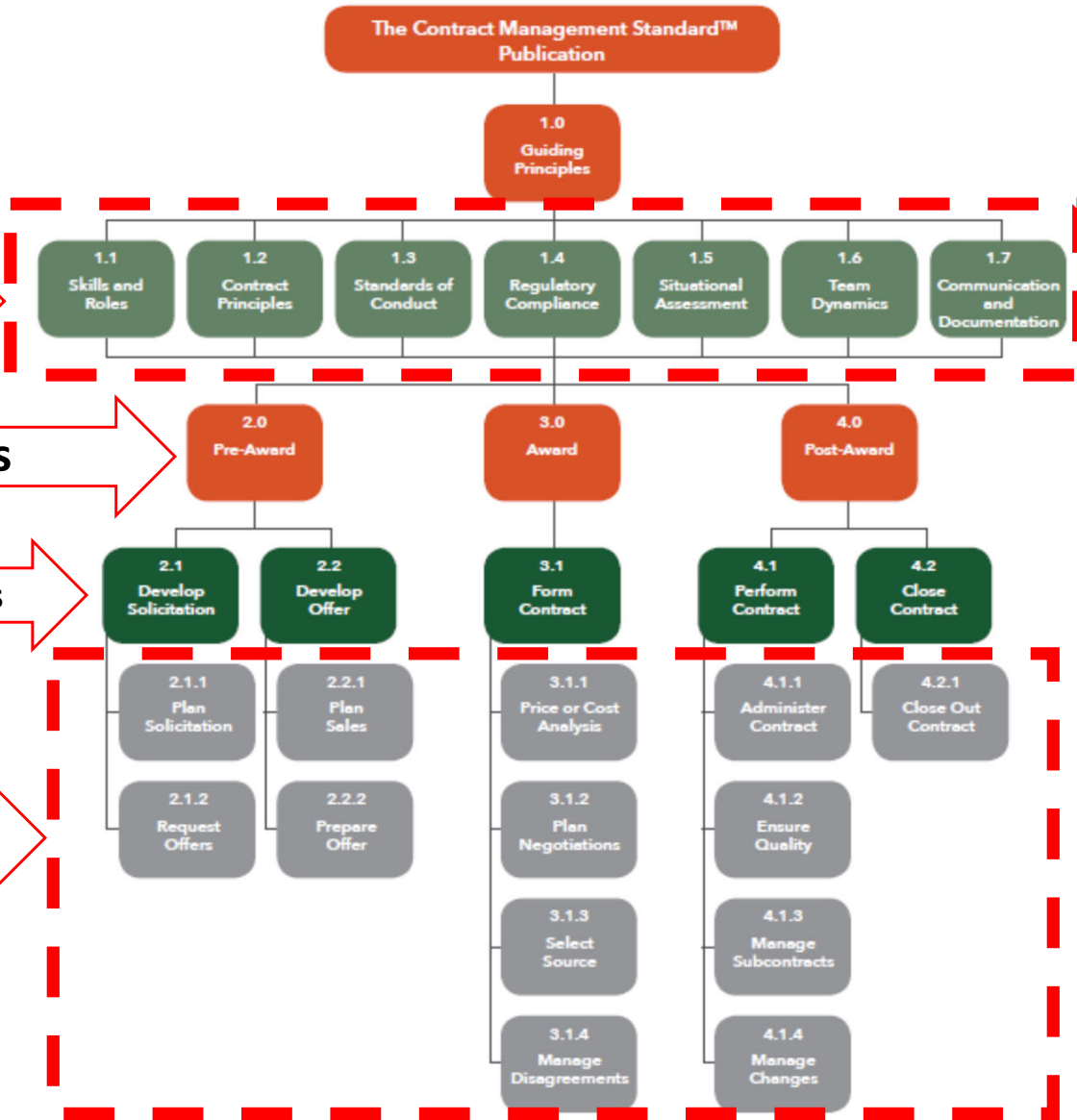
Competencies

Life Cycle Phases

The areas within a contract life cycle that produces significant contract management outcomes.

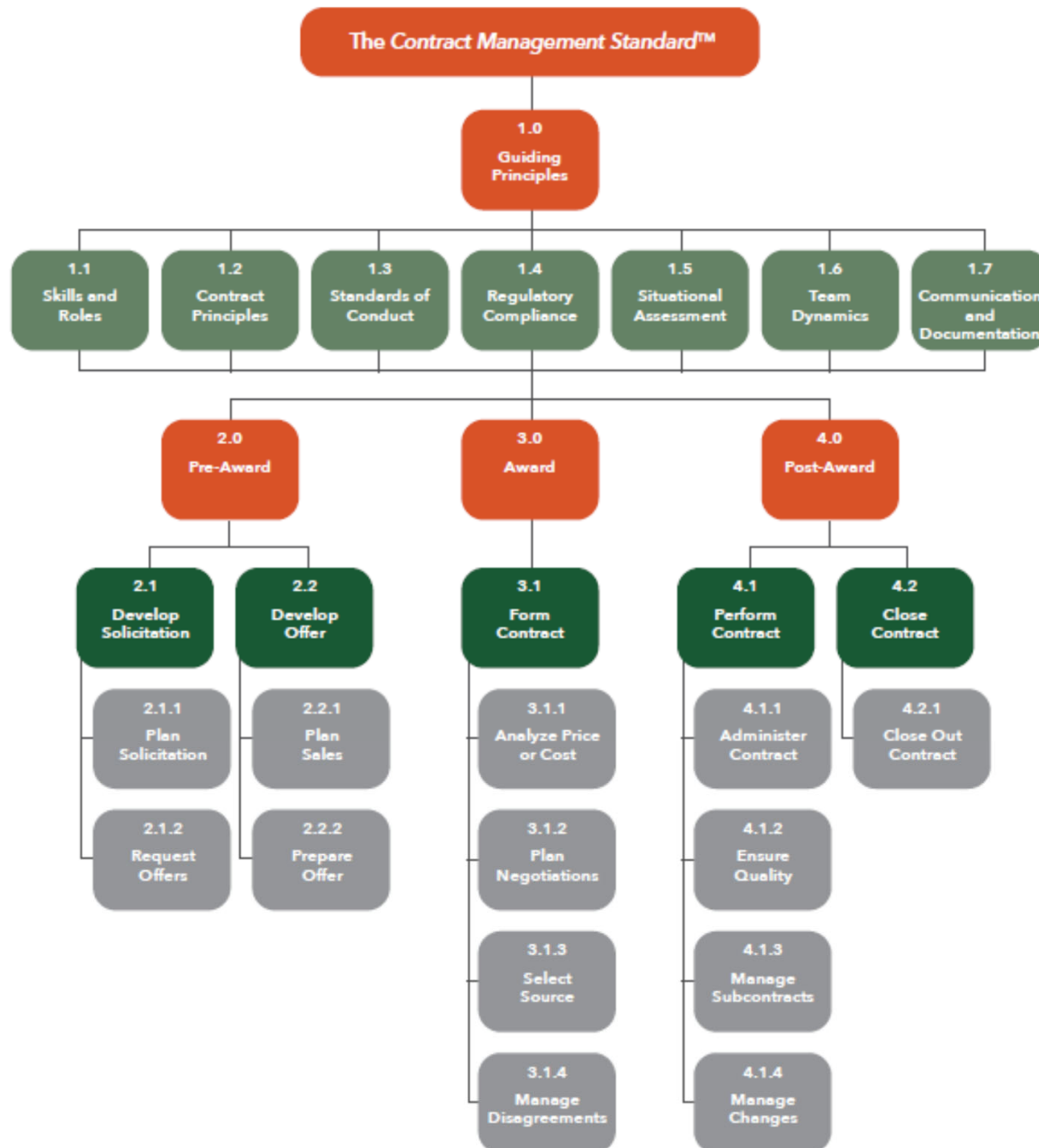
Domains

Competencies



The Contract Management Standard™ is established as presented in FIGURE 2.

FIGURE 2. The Contract Management Standard™





CMS-FAR-UCC Matrix

This matrix cross-references the competencies and job tasks of the [Contract Management Standard™](#), Third Edition [American National Standard ANSI/NCMA ASD 1-2019 (R2022)] with the Parts of the [Federal Acquisition Regulation](#) (FAR) and the Articles of the [Uniform Commercial Code](#) (UCC).

| CMS Competency | Job Task | FAR Part | UCC Article (Part) |
|-------------------------------------|--------------------------------------|--|--------------------|
| 1.0 Guiding Principles | | | |
| 1.1 Skills and Roles | | 1 | 1, 2 – 9 (1) |
| 1.2 Contract Principles | | 1 | 1, 2 – 9 (1) |
| 1.3 Standards of Conduct | | 3, 9 | 1, 2 – 9 (1) |
| 1.4 Regulatory Compliance | | 22, 23, 24, 27, 28, 29 | 1, 2 – 9 (1) |
| 1.5 Situational Assessment | | 17, 18, 25, 34, 35, 36, 37, 38, 39, 41, 50 | 1, 2 – 9 (1) |
| 1.6 Team Dynamics | | 1, 2, 4 | NA |
| 1.7 Communication and Documentation | | 1 – 52 | 1 – 9 |
| 2.0 Pre-Award | | | |
| 2.1 Develop Solicitation | | | |
| 2.1.1 Plan Solicitation | Shape Internal Customer Requirements | 11 | NA |
| | Conduct Market Research | 5, 7, 10 | NA |
| | Perform Risk Analysis | 6, 8, 10, 15, 19, 26 | NA |
| | Formulate Contracting Strategy | 12, 13, 14, 15, 16 | NA |
| | Finalize Solicitation Plan | 12, 13, 14, 15 | NA |
| 2.1.2 Request Offers | Execute Solicitation Plan | 12, 13, 14, 15 | NA |
| | Prepare Solicitations | 12, 13, 14, 15 | NA |
| | Issue Solicitations | 5, 12, 13, 14, 15 | 2 (2) |
| | Respond to Seller Communications | 5, 12, 13, 14, 15 | 2 (2) |
| | Amend Solicitations | 12, 13, 14, 15 | 2 (2) |



| 2.2 Develop Offer | | | |
|---------------------|--|-------------------|------------------|
| 2.2.1 Plan Sales | Conduct Pre-Sales Activities | 3, 5 | NA |
| | Evaluate Solicitation | 2 | 2 (2), 2A (2), 6 |
| | Conduct Bid/No-Bid Analysis | 6, 9 | 2 (2), 2A (2) |
| | Finalize Sales Plan | 7, 12, 13, 14, 15 | 2 (2), 2A (2), 6 |
| 2.2.2 Prepare Offer | Execute Sales Plan | 12, 13, 14, 15 | 2 (2), 2A (2) |
| | Develop Execution Plan | 45, 46 | 2 (2), 2A (2) |
| | Develop Risk Mitigation Plans | 32, 42, 49 | 2 (3), 2A (2) |
| | Assess Teaming Options and Partners | 9, 19, 44, 51 | 2 (2), 2A (2) |
| | Participate in Customer Communications | 5 | 2 (2), 2A (2) |
| | Finalize Offer | 4, 53 | 2 (2), 2A (2), 6 |

3.0 Award

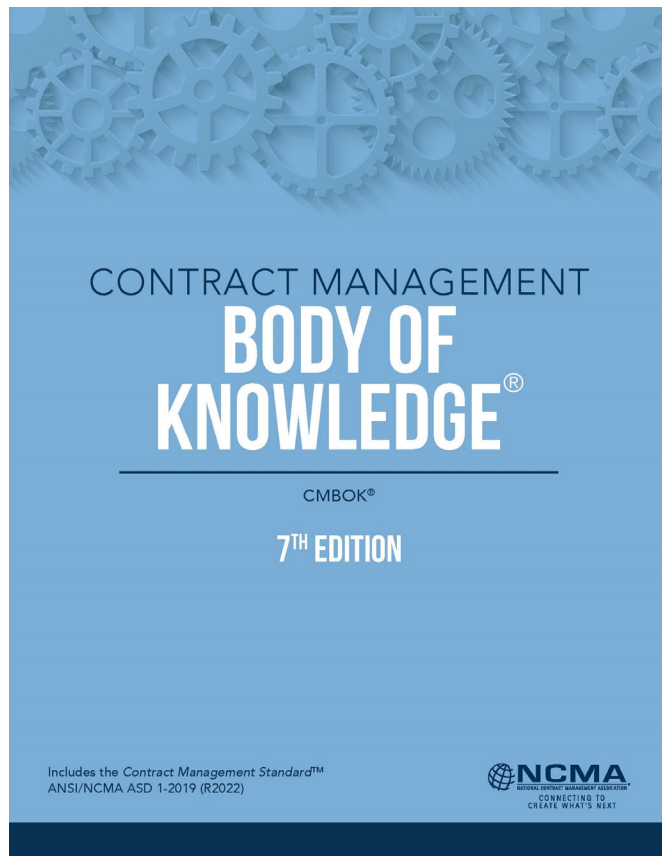
| 3.1 Form Contract | | | |
|------------------------------|--|----------------|-------------------|
| 3.1.1 Price or Cost Analysis | Comprehend Offer | 12, 13, 14, 15 | NA |
| | Evaluate Seller Terms & Their Impact on Risk | 12, 13, 14, 15 | 3 (2) |
| | Determine Reasonable Pricing | 30, 31 | 3 (2) |
| | Document Analysis Results | 30, 31 | 3 (2) |
| 3.1.2 Plan Negotiations | Clarification Requests | 12, 13, 14, 15 | NA |
| | Document Negotiation Objectives | 12, 13, 14, 15 | NA |
| | Conduct Discussions | 12, 13, 14, 15 | NA |
| 3.1.3 Select Source | Review Compliance of Offer(s) | 12, 13, 14, 15 | 2 (2 - 3), 2A (2) |
| | Source Selection | 12, 13, 14, 15 | 2 (2 - 3), 2A (2) |
| | Conduct Negotiations | 12, 13, 14, 15 | 2 (2 - 3), 2A (2) |
| | Finalize Negotiations | 12, 13, 14, 15 | 2 (2 - 3), 2A (2) |
| | Final Offer Revision | 12, 13, 14, 15 | 2 (2 - 3), 2A (2) |
| | Prepare Contract Document | 12, 13, 14, 15 | 2 (2 - 3), 2A (2) |
| | Finalize Contract Award | 12, 13, 14, 15 | 2 (2 - 3), 2A (2) |
| | Document Outcome of Offer | 12, 13, 14, 15 | 2 (2 - 3), 2A (2) |
| 3.1.4 Manage Disagreements | Submit Protests and Appeals | 33 | NA |
| | Respond to Protests and Appeals | 33 | NA |

4.0 Post-Award

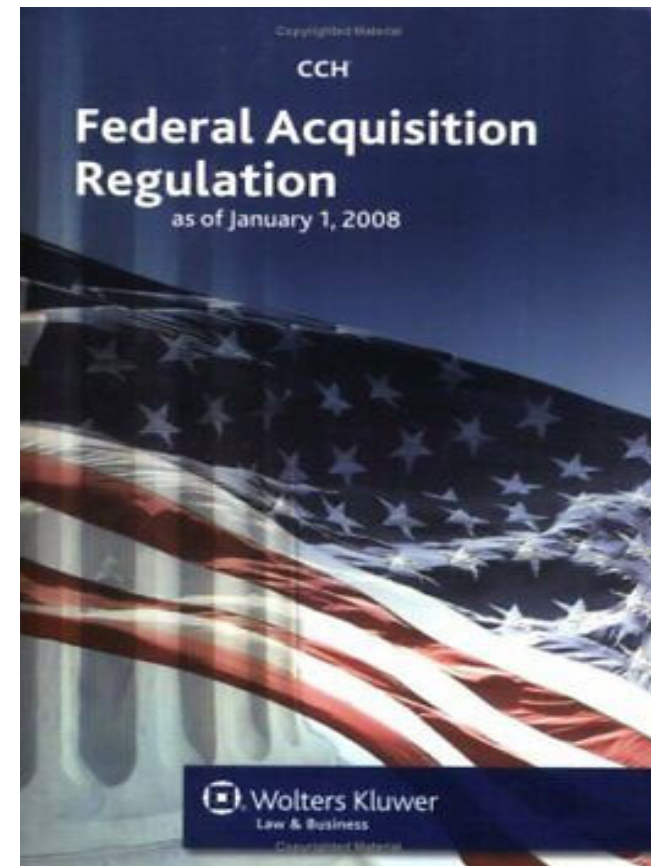
4.1 Perform Contract

| | | | |
|---------------------------|---|---------------------------|----------------------------------|
| 4.1.1 Administer Contract | Execute Contract | 12, 13, 14, 15 | 1 – 9 |
| | Conduct Post-Award Conference Meeting | 42 | NA |
| | Maintain Contract Documentation/Files | 4, 45 | 1 – 9 |
| | Provide Cost Information | 30, 31 | 3 (2), 4, 4A, 5 |
| | Establish/Maintain Communications | 1 | NA |
| | Evaluate Interim Contractor Performance | 42, 47, 48 | 2 (2, 5, 6, 7), 2A (2, 4) |
| | Manage Deliverables | 12, 13, 14, 15 | 2 (2, 5, 6, 7), 2A (2, 4) |
| 4.1.2 Ensure Quality | Plan for Contract Performance Delivery | 46 | 2 (5, 6, 7), 2A (2, 4), 3 (2) |
| | Plan for Contract Performance Monitoring | 46 | 2 (5, 6, 7), 2A (2, 4), 3 (2) |
| | Inspect and Accept Contract Performance | 46 | 2 (5, 6, 7), 2A (2, 3, 4), 3 (2) |
| 4.1.3 Manage Subcontracts | Determine Supply Chain Requirements | 9, 19, 44 | 2(2) |
| | Issue Subcontracts | 9, 44 | NA |
| 4.1.4 Manage Changes | Manage Contract Changes | 43 | 2 (2, 6, 7), 2A (2), 3 (2) |
| | Conduct Contract Interpretation | 2, 33 | 2 (1), 3(2) |
| | Determine Contract Termination | 49 | 2 (6, 7), 2A (2, 4, 5), 3 (3) |
| 4.2 Close Contract | | | |
| 4.2.1 Close Out Contract | Validate Contract Performance | 42 | NA |
| | Verify Physical Contract Completion | 42 | NA |
| | Prepare Contract Completion Documents | 4 | NA |
| | Coordinate Final Disposition of Owner-Provided Property/Equipment/Information | 45 | NA |
| | Settle Subcontracts | 44 | NA |
| | Reconcile Contract | 4 | NA |
| | Make Final Payment | 4, 31, 32 | 4, 4A, 5 |
| | Evaluate Final Contractor Performance | 42, 47, 48 | NA |
| | Finalize Contract | 4, 12, 13, 14, 15, 42, 52 | NA |

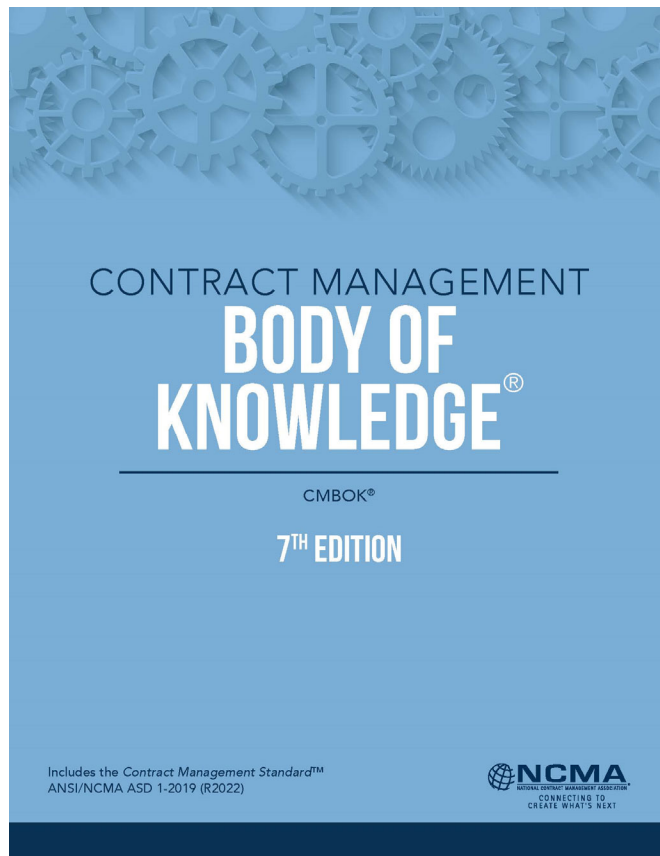
Contract Management Principles



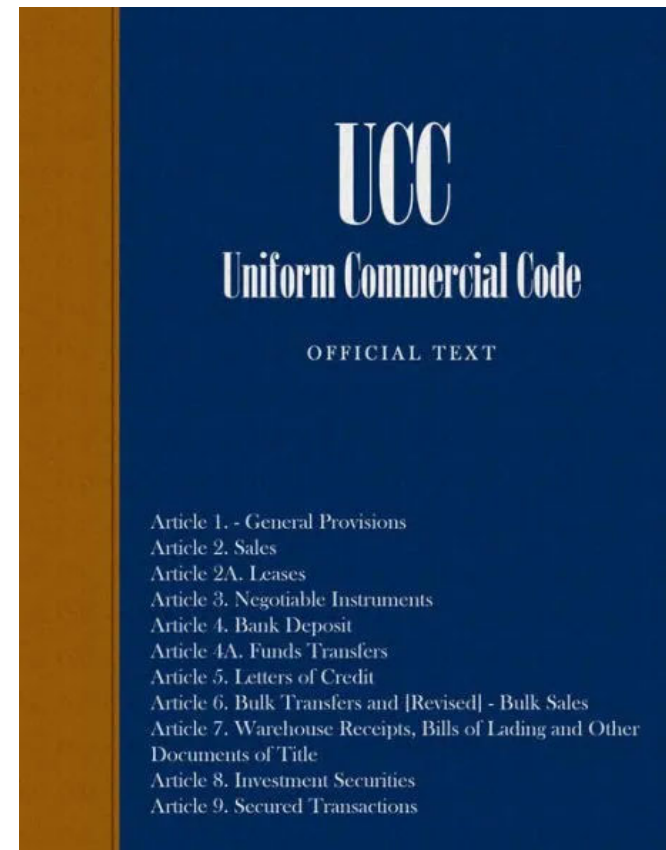
Application in Federal Government Contracting



Contract Management Principles



Application in Commercial Contracting



Theory vs. Practice

- Theory: a set of concepts used to define and/or explain some phenomenon (Silverman, 2000).
- There is nothing so practical as a good theory (Lewin, 1951).
- Theory and practice can and should be integrated, each informing the other.

Management Theories

- Theory of Core Competencies
- Resource/Knowledge-Based View (RBV) Theory
- Strategic Choice Theory
- Resource Dependence Theory
- Auditability Theory

Economic Theories

- Transaction Cost Economics Theory
- Principal-Agent Theory
- Contractual Theory

Principal-Agent Theory

- When one organization delegates responsibility to another organization, the first organization must monitor the second organization or risk opportunistic behavior.
- Conflicting objectives and information asymmetry between the parties may lead to opportunistic behavior in the form of adverse selection (hidden information) or moral hazard (hidden behavior).

Agency Theory

(The **Principal-Agent** Problem)

Government

Contractor

Objectives

Procure product/service at the right:
Quality
Quantity
Source
Price
Time
Supporting Public Policy

Conflicting

Objectives

Deliver product/service and earn:
Profit
Growth
Market Share
Cash Flow

Information

Marketplace
Requirement
Govt's Mission
Ctr's Capability

Behavior

Behavior

How Contracts are:

Planned
Structured
Awarded
Administered
Completed

(Rendon, R.G., 2015)

Theory Supporting Practice

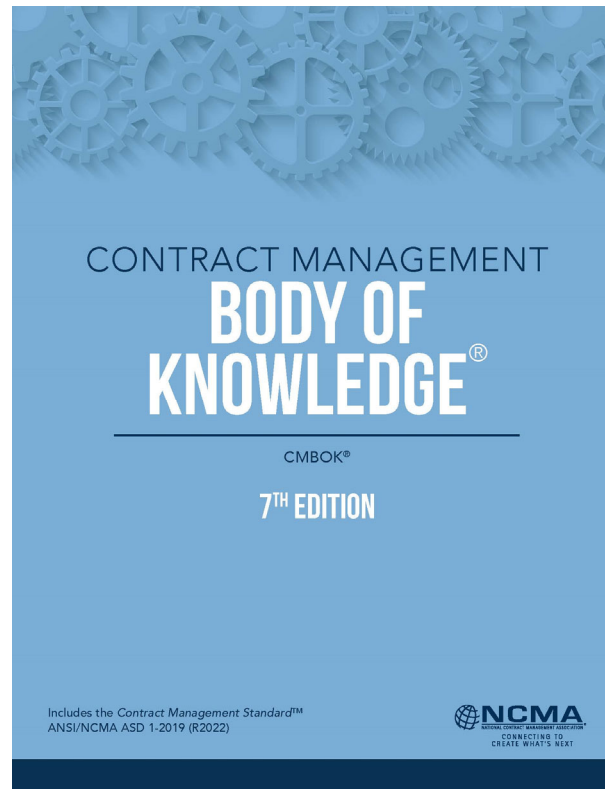
- Contract managers should use theory as conceptual frameworks that support contract management principles.
 - Theory should inform contract managers on actions to take and how to implement those actions.
 - Contract managers should recognize how an organization's current situation departs from the conceptual framework.
 - Contract managers should implement organizational strategies to close identified gaps.

Contract Management Foundational Theories

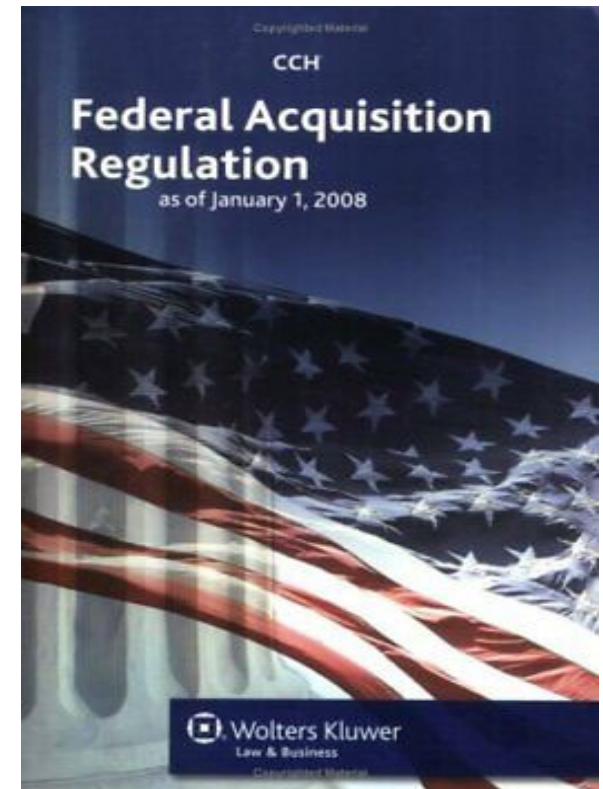
Management Theories

Economic Theories

Contract Management Principles



Application in Federal Government





NAVAL POSTGRADUATE SCHOOL

Commencement
Ceremony



NAVAL POSTGRADUATE SCHOOL

1 University Circle | Monterey, CA 93943 | www.nps.edu

NPS Catalog

The Defense Contract Management curriculum is an interdisciplinary program which integrates management theory, accounting, economics, finance, behavioral science, management theory, operations/systems analysis, and specific courses in acquisition and contracting. The 815 curriculum includes a concentration option in strategic purchasing. Student input includes officers and civilians from all DoD services, other federal agencies and allied nations. The curriculum is designed to provide officers and civilians with the skills to serve effectively in systems buying offices, field contracting offices, contract administration offices, and contracting policy offices. The program can be delivered in 12 to 18-months, by adding Joint Professional Military Education courses or elective academic certificates as required. The program contributes to Defense Acquisition Workforce Improvement Act (DAWIA) certification in the Contract Management career field. Additionally, the curriculum is aligned with the competencies established in the National Contract Management Association (NCMA) Contract Management Body of Knowledge (CMBOK) and the Contract Management Standard (CMS). The curriculum supports preparation for the NCMA professional certification examinations including the Certified Federal Contract Manager (CFCM) and the Certified Professional Contract Manager (CPCM).

Questions to Consider

- Does your organization use the CMBOK/CMS?
- How does your organization use the CMBOK/CMS?
- How can your organization use the CMBOK/CMS?