

# Management System Description: Cost Estimating

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## 1.0 Purpose

This subject area provides Environmental Management Consolidated Business Center (EMCBC) procedures to fully integrate sound cost estimating practices into all of EM's acquisition and project management processes by establishing EM Corporate cost estimating requirements and providing oversight for contractor-developed cost estimates, preparing Independent Government Cost Estimates (IGCE) to support EM Acquisition Center activities, preparing Independent Cost Estimates (ICE) to support EM project planning and execution needs, performing Independent Cost Reviews (ICR) of contractor-developed cost estimates, supporting Risk Management Planning activities, and expanding our role in EM's Life-Cycle Planning processes to facilitate development of environmental liability estimates.

## 2.0 Responsibilities

<b>Roles</b>	<b>Responsibilities</b>
EM Deputy Assistant Secretary For Program Planning and Budget (EM-60)	<ul style="list-style-type: none"><li>• Office of Program Planning and Budget (EM-60) is to manage and coordinate planning and budget support for the Office of Environmental Management (EM). Consistent with this mission, EM-60 has responsibility for developing and implementing EM's Corporate Cost Estimating and Analysis (CE&amp;A) Program.</li><li>• EM Office of Strategic Planning and Analysis (EM-62) will serve as the EMCBC Office of Cost Estimating &amp; Project Management Support's corporate sponsor.</li></ul>

<p>EM Deputy Assistant Secretary For Acquisition and Project Management (EM-50)</p>	<ul style="list-style-type: none"> <li>• EM Head of Contracting Activity (HCA) is responsible for effective and efficient operation of the procurement and assistance functions within EM, and compliance with pertinent statutes, regulation and DOE policy as necessary to achieve the mission, goals, and objectives of the Department.</li> <li>• Provides construction and capital asset project management authority on behalf of EM-1, and provides independent oversight of EM construction and capital asset projects, including all activities involved with on-site cost, schedule, technical, and management status review.</li> </ul>
<p>Office of Environmental Management Consolidated Business Center</p>	<ul style="list-style-type: none"> <li>• The EMCBC serves the DOE Office of Environmental Management (EM) with a mission to provide our customer sites with business and technical resources that includes: Office of Technical Support and Asset Management, Office of Financial Management, Human Capital Management, Information Resources Management, Office of Contracting, Office of Legal Services, and <i>Office of Cost Estimating and Project Management Support</i>.</li> </ul>
<p>EMCBC Office of Cost Estimating and Project Management Support (Cost Estimating Team)</p>	<ul style="list-style-type: none"> <li>• Establish standards, policy, and procedures to ensure that EM cost and schedule estimates are accurate, traceable, and reliable.</li> <li>• Provide IGCE's, ICE's, ICR's and Independent Cost Analysis (ICA) to support EM acquisition and project management program requirements.</li> <li>• Provide independent cost estimating and analysis support to EM management, the EM Acquisition Advisory Board (EMAAB), and EM budget formulation</li> </ul>

	<p>processes.</p> <ul style="list-style-type: none"> <li>• Lead the development and management of cost and schedule databases, methodologies, and tools needed by EM to improve and standardize its cost estimating and analysis capabilities.</li> </ul>
EMCBC Office of Contracting	<ul style="list-style-type: none"> <li>• Requests IGCE's required by established Federal Acquisition Regulation (FAR), Department of Energy Acquisition Regulation (DEAR), DOE, and DOE-EM requirements for all pre-award and post-award contract administration processes.</li> </ul>
EM Small Site Federal Project Directors (FPD)	<ul style="list-style-type: none"> <li>• Comply with established DOE cost estimating requirements for all EM Capital Asset Projects and EM Clean-up Projects (DOE O 413.3B), Real Property Asset Management programs (DOE O 430.1B, Change 2), and EM Operating Projects (EM Operations Protocol).</li> </ul>

### 3.0 Management System Operation

#### 3.1 Overview

The core cost estimating and analysis functions the EMCBC Cost Estimating team will provide to EMCBC Serviced Sites include:

- Acquisition and Contract Management Support
- Performing Life-Cycle Cost Analyses (LCCA)
- Preparing IGCE's
- Provide cost engineering support for contractor-submitted proposals, if requested.
- Provide cost engineering support to Acquisition-related Source Evaluation Boards
- Support Project Close-out activities by capturing actual project costs and integrating actual project cost data to the EM Environmental Cost Analysis System (ECAS)
- Project Planning & Execution Support
- Support Federal Project Directors (FPD) and serve on project-specific Integrated Project Teams (IPT)
- Provide support and oversight for contractor-developed cost estimates
- ICE's
- ICR's

- Support risk management planning activities
- Support the establishment project-specific CE&A requirements (tailoring)
- Support performance evaluation activities ~ trend & cost variance analysis.

Note: Each EM Program, Field Office, and Small Site Project Office is responsible for development of required cost estimates. The EM Consolidated Business Center's (EM CBC) Office of Cost Estimating and Project Management Support is the primary EM source for site or project-specific cost estimates on a cost reimbursable basis. It is the responsibility of the EM Program, Field Office, and Small Site Project Office to plan for and work directly with the EM CBC Office of Cost Estimating and Project Management Support to meet their cost estimating needs.

### 3.2 Key Functions/Services and Processes

<b>Customers</b>	<b>Functions / Services Provided</b>
<p><b>EMCBC Serviced Sites</b></p> <p><b>EM Field Offices</b> (<i>upon request</i>)</p>	<ul style="list-style-type: none"> <li>• Acquisition Support <ul style="list-style-type: none"> <li>○ Performing life-cycle cost analyses</li> <li>○ IGCE's</li> <li>○ Perform reasonableness or technical review of costs for contractor-submitted proposals</li> <li>○ Provide cost engineering support to Acquisition-related Source Evaluation Boards</li> <li>○ Support Project Close-out activities by capturing actual project costs and integrating actual project cost data to the EM ECAS</li> </ul> </li> <li>• Project Planning &amp; Execution Support <ul style="list-style-type: none"> <li>○ Support Federal Project Directors (FPD) and serve on Integrated Project Teams (IPT)</li> <li>○ Provide support and oversight for contractor-developed cost estimates</li> <li>○ ICE's</li> <li>○ ICR's</li> <li>○ Support risk management planning activities</li> <li>○ Support the establishment project-specific CE&amp;A requirements (tailoring)</li> <li>○ Support performance evaluation activities ~ trend &amp; cost variance analysis</li> </ul> </li> </ul>
<p><b>EM Headquarters</b></p>	<ul style="list-style-type: none"> <li>• Establish standards, policy, and procedures to</li> </ul>

	<p>ensure that EM cost and schedule estimates are accurate, traceable, and reliable.</p> <ul style="list-style-type: none"> <li>• Provide Independent Cost Estimating and Independent Cost Analysis capability to support EM acquisition and project management program requirements.</li> <li>• Provide independent cost estimating and analysis support to EM management, the EM Acquisition Advisory Board (EMAAB), and EM budget formulation processes.</li> <li>• Lead the development and management of cost and schedule databases, methodologies, and tools needed by EM to improve and standardize its cost estimating and analysis capabilities.</li> </ul>
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## 4.0 Requirements

### 4.1 Primary Responsibility

#### 4.1.1 Acquisition and Contract Management Support

This Management System has primary responsibility for the following requirements:

Document	Title
EM HCA X.XX	<i>EM IGCE Policy - Under Development</i>
<a href="#">FAR 36.203</a>	<i>Government Estimate of Construction Costs</i> ( <a href="https://www.acquisition.gov/far/current/pdf/FAR.pdf">https://www.acquisition.gov/far/current/pdf/FAR.pdf</a> )
<a href="#">FAR 15.404</a>	<i>15.404 Proposal Analysis</i> ( <a href="https://www.acquisition.gov/far/current/pdf/FAR.pdf">https://www.acquisition.gov/far/current/pdf/FAR.pdf</a> )
<a href="#">DOE O 413.3B</a>	<i>Program and Project Management for the Acquisition of Capital Assets, dated 11-29-10 (Appendix A, Section 6-e)</i>
<a href="#">DOE G 413.3-20</a>	<i>Change Control Management Guide</i>

#### 4.1.2 Project Management Support

This Management System has primary responsibility for the following requirements:

<b>Document</b>	<b>Title</b>
<a href="#">DOE O 413.3B</a>	<i>Program and Project Management for the Acquisition of Capital Assets, dated 11-29-10</i>
<a href="#">DOE O 430.1B</a>	<i>Real Property Asset Management, dated 9-24-03</i>

#### 4.2 Parsed Responsibility

This Management System is responsible to support maintenance of the following parsed requirements:

<b>Document</b>	<b>Title</b>
<a href="#">DOE G 413.3-21</a>	<i>DOE Cost Estimating Guide</i>
<a href="#">DOE G 413.3-5A</a>	<i>Performance Baseline</i>
<a href="#">DOE G 413.3-7A</a>	<i>Risk Management</i>
<a href="#">DOE G 413.3-9</a>	<i>Project Reviews</i>
<a href="#">DOE G 413.3-12</a>	<i>Project Definition Rating Index</i>
<a href="#">DOE G 413.3-13</a>	<i>Acquisition Strategy Guide for Capital Asset Projects</i>
<a href="#">DOE G 413.3-15</a>	<i>Project Execution Plans</i>
<a href="#">DOE G 413.3-16A</a>	<i>Project Completion / Closeout Guide</i>
<a href="#">DOE G 413.3-20</a>	<i>Change Control Management Guide</i>
<a href="#">DOE G 413.3-18A</a>	<i>Integrated Project Team</i>
Under Development	<i>EM Cost Estimate Development Practice</i>
<a href="http://www.gao.gov/new.items/d093sp.pdf">http://www.gao.gov/new.items/d093sp.pdf</a> GAO-09-3SP	<i>GAO Cost Estimating &amp; Assessment Guide</i>
Under Development	<i>EM Independent Cost Estimate Review Procedure</i>

Under Development

*EM Basis of Estimate Procedure*

## 5.0 Subject Areas, Program Descriptions, and Guidance Documents

The following Subject Area Procedures are referenced by this Management System:

<b>Procedures</b>	<b>Procedure Content</b>
<a href="#">IP-413-02; Technical Evaluation of Cost (TEC) Procedure in Support of Formal Source Evaluation Board's (SEB's) for Competitively Awarded Contracts</a>	Identifies the process for conducting the Technical Evaluation of Cost (TEC) and developing documentation for the evaluation, in support of a Source Evaluation Board (SEB), for a contract to be competitively awarded for the Environmental Management Consolidated Business Center (EMCBC)
<a href="#">IP-540-09, Rev2: Cost and Pricing Analysis Support for Financial Assistance Actions and Post-Award Contract Actions</a>	This procedure establishes the general process for requesting and providing cost and price analysis support for financial assistance actions and post-award contract actions and establishes IGCE requirements for contracts administered by the EMCBC

## 6.0 References

- [EM CE&A Overview](#)
- [Cost Estimate Process Workflow](#)
- [Basis of Estimate \(BOE\) Template](#)
- [Integrated Authorization Process \(IAP\) for M&O Contracts](#)
- [Integrated Authorization Process \(IAP\) for Non M&O Contracts](#)
- [Characteristics of a High Quality Cost Estimate](#)