DEPARTMENT OF DEFENSE
Defense Contract Management Agency

INSTRUCTION

Continuous Process Improvement (CPI)/ Lean Six Sigma (LSS) Program

Corporate Support Directorate **DCMA-INST 591**
OPR: DCMA-DSI **April 2, 2013**
Validated Current with Administrative Changes, May 29, 2014

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1. PURPOSE. This Instruction:

a. Incorporates and supersedes DCMA Instruction (DCMA-INST), "Continuous Improvement Idea Identification (CIII)" (Reference (a)).

b. Establishes policy, assigns responsibilities, and provides guidance for the implementation of the Continuous Process Improvement/Lean Six Sigma (CPI/LSS) program in accordance with DoD Directive (DoDD) 5105.64, "Defense Contract Management Agency (DCMA)" (Reference (b)), DoDD 5010.42, "DoD-Wide Continuous Process Improvement (CPI)/Lean Six Sigma (LSS) Program" (Reference (c)), and DoD Instruction (DoDI) 5010.43, "Implementation and Management of the DoD-Wide Continuous Process Improvement/Lean Six Sigma (CPI/LSS) Program" (Reference (d)).

2. APPLICABILITY. This Instruction applies to all DCMA Components.

3. MANAGERS' INTERNAL CONTROL PROGRAM. In accordance with the DCMA-INST 710, "Managers' Internal Control Program" (Reference (e)), this Instruction is subject to evaluation and testing. The process flowchart is located at Appendix A.

4. RELEASABILITY – UNLIMITED. This instruction is approved for public release.

5. PLAS CODE(S).

a. Processes:

Process Being Improved and National Program Code CPILSSH
124B – Receive Other Training - Classroom training, projects-in-training and mentoring and Appropriate National Program Code for Training Received
124C – Perform Training Management - Certification process and Appropriate National Program Code for Training Received

b. Programs: ACAT/Other Customers (when applicable).

c. Other National; Training and Travel; Local Programs (when applicable).
CPILSSA – CPI-LSS Champion Training
CPILSSB – CPI-LSS Green Belt Classroom Training
CPILSSC – CPI-LSS Green Belt Project
CPILSSD – CPI-LSS Black Belt Classroom Training
CPILSSE – CPI-LSS Black Belt Project
CPILSSF – CPI-LSS Black Belt Mentoring
CPILSSG – CPI-LSS Certification
CPILSSH – CPI-LSS Continuous Process Improvement
CPILSSP – Strategic Project Identification & Prioritization

6. POLICY RESOURCE WEB PAGE. https://home.dcma.mil/policy/591r

7. EFFECTIVE DATE. By order of the Director, DCMA, this Instruction is effective immediately.

Martin J. Jakim
Executive Director
Corporate Support

TABLE OF CONTENTS

REFERENCES

(a) DCMA Instruction 592, "Continuous Improvement Idea Identification (CIII)," July 2010 (hereby canceled)
(b) DoD Directive 5105.64, "Defense Contract Management Agency (DCMA)," January 10, 2013
(c) DoD Directive 5010.42, "DoD-Wide Continuous Process Improvement (CPI)/Lean Six Sigma (LSS) Program," May 15, 2008
(d) DoD Instruction 5010.43, "Implementation and Management of the DoD-Wide Continuous Process Improvement/Lean Six Sigma (CPI/LSS) Program," July 17, 2009
(e) DCMA-INST 710, "Managers' Internal Control Program," April 21, 2014
(f) Deputy Chief Management Officer (DCMO) Memorandum, "Department of Defense (DoD) Continuous Process Improvement (CPI)/Lean Six Sigma (LSS) Program Office Practitioner Body of Knowledge and Certification Requirements," March 3, 2009
(g) DCMA Memorandum, "DCMA Corporate Governance Structure," January 13, 2012

CHAPTER 1

POLICY

1.1. OBJECTIVE. The objective of the CPI/LSS program is to strengthen Agency capabilities and make improvements in productivity, performance against mission (availability, reliability, cycle time, investment, and operating costs), safety, flexibility to meet mission needs, and energy efficiency.

1.2. POLICY.

1.2.1. CPI/LSS Program Implementation.

1.2.1.1. Per DoDD 5010.42 (Reference (c)), DCMA shall execute effective CPI/LSS program implementation and achieve long term successes based on fact-based decisions. CPI/LSS is an essential program for improving the operating effectiveness of the Agency across the full range of operational, administrative, science and technology, and support functions. LSS is one of several structured process improvement methodologies that can exist within a comprehensive continuous process improvement program; however, LSS has been designated as a preferred method by Office of the Secretary of Defense (OSD) because of its large scale adoption throughout the military services and in the private sector. CPI is bigger than just LSS, but LSS is the process improvement structure, training, and project methodology primarily used by OSD.

1.2.1.2. CPI/LSS concepts, methodologies, and best practices shall be applied to assure cost-effective management and implementation of improved processes and new technologies throughout the Agency.

1.2.1.3. Components shall establish an internal CPI/LSS program infrastructure with a cadre of practitioners that are knowledgeable of CPI/LSS principles and methodologies. This cadre includes trained and certified LSS practitioners, Performance Improvement Officers (PIO), the Component Deployment Group, LSS Project Champions, and others.

1.2.1.4. Component Heads shall actively manage their LSS project portfolio, to include charter development, project prioritization and selection, project execution, resource allocation, return on investment (ROI) calculation, benefits tracking, and reporting results to the Operations Integration Panel (OIP).

1.2.2. Capturing and Reporting Results. A robust CPI program captures and publicizes the positive results achieved as an outcome of CPI/LSS projects. These results shall be documented and maintained in an automated, transparent fashion for purposes of management review, assessment, research, knowledge sharing, and historical reference. The system that facilitates this open exchange of information is managed by OSD and is called the Defense Enterprise Performance Management System (DEPMS). DEPMS provides the Agency with a structured knowledge management and information sharing capability to foster the deployment of the CPI/LSS program. This focus on program integration capability shall maximize the use of

CPI/LSS ideas and adopted DoD-wide business practices. Trained and certified Belt practitioners shall be responsible for uploading and maintaining current and accurate information on their LSS projects in DEPMS.

1.2.3. Return on Investment (ROI). All gated projects are required to capture the costs to accomplish a project during the Control phase. The Component Head shall report the resulting project benefits (monetary and nonmonetary) from completed projects within their purview to the OIP. These benefits are to be reported as Type 1, Type 2 and Type 3.

1.2.3.1. Type 1 benefits have a direct impact on the bottom line. There is a clear cause and effect relationship between the project and resulting gain that can be quantified and measured. Type 1 savings are 'hard' savings. Examples include overtime reduction due to process improvement, periodic cost reduction, and a reduction in space requirements which enables the activity to vacate a facility.

1.2.3.2. Type 2 benefits result from the productive redeployment of human and capital resources to other functions or areas with a demonstrated need. Type 2 savings are 'soft' savings, in other words, they offset cost growth in areas but cannot be taken off the bottom line of the agency.

1.2.3.3. Type 3 benefits generally create potential opportunities for future savings but the impact to the bottom line is uncertain or the baseline cost is not in our existing cost structure. Type 3 savings are intangible and are not even considered 'cost avoidance.' An example of a Type 3 benefit would be a project that reduces current manpower requirements, but the people cannot be productively redeployed to other functions with demonstrated needs. A savings to a customer or supplier could also be categorized as a Type 3.

1.2.4. Savings. Components shall be permitted to retain savings and other benefits generated by CPI/LSS projects, unless such projects are considered to be Enterprise level or are otherwise explicitly directed to meet efficiency targets in accordance with Agency guidance.

1.2.5. Training Deployment. The curriculum for each level of LSS training shall be the formal LSS Body of Knowledge as outlined by OSD in Deputy Chief Management Officer (DCMO) Memorandum, "Department of Defense (DoD) Continuous Process Improvement (CPI)/Lean Six Sigma (LSS) Program Office Practitioner Body of Knowledge and Certification Requirements" (Reference (f)). In accordance with recognized industry and OSD best practices ***for training and project execution as*** provided in Enclosure 2 of DoDI 5010.43 (Reference (d)), the Agency shall achieve and maintain a cadre of trained LSS practitioners (Belts) to support the goals of a robust Agency-wide program deployment, to the extent resources are available.

1.2.5.1. Components shall select and encourage high-performing candidates to participate in the LSS program and shall identify specific needs for local LSS training.

1.2.5.2. The CPI Office shall maintain the in-house capability to train identified candidates for Green Belt (GB), Black Belts (BB) and LSS Champions in the formal OSD LSS Body of Knowledge. Once the mandated program goals are met, training shall continue at a

sustainment level. Additionally, the CPI Office shall maintain a capability to train new Belt and Champion candidates at any time if desired by Agency leadership to address identified strategic gaps and specific efficiency targets.

1.2.5.3. The CPI Office shall identify and track CPI/LSS practitioners throughout the workforce by registering the training and certification status of military and civilian CPI practitioners across the enterprise in the DEPMS database.

1.2.6. Maximizing Benefits. In order to maximize return on investment, each Component's trained GBs and BBs must either lead or participate in one or more CPI/LSS events sponsored by their leadership each fiscal year, and shall be encouraged to enhance CPI/LSS training through additional events, projects, training, or continuing education (conferences, courses, etc.), in accordance with Enclosure 2 of DoDI 5010.43 (Reference (d)). Projects shall be logged and tracked in DEPMS.

1.2.7. Belt Sharing. Due to the nature of LSS improvement, the simple act of getting to ground truth and breaking down paradigms can be deeply contentious. In difficult projects, especially at the BB level, complete impartiality and neutrality on the part of the Belt practitioner is essential to project success. Therefore, Components are encouraged to exchange and share the services of their Belts with other Components, thereby ensuring widespread project success and a positive ROI throughout the Agency.

CHAPTER 2

ROLES AND RESPONSIBILITIES

2.1. DIRECTOR, DCMA. The Director, DCMA shall ensure implementation of CPI/LSS policies in accordance with DoDD 5010.42 (Reference (c)) and additional guidance approved by the DoD CPI Senior Steering Committee (SSC), a multi-Agency DoD CPI/LSS advisory panel as chaired by the Deputy Chief Management Office (DCMO). To this end, the Director has delegated the Executive Director, Corporate Support (DS) to establish, oversee, and implement the CPI/LSS Program.

2.2. EXECUTIVE DIRECTOR, CORPORATE SUPPORT (DS). The Executive Director, Corporate Support (DS) shall:

2.2.1. Establish and oversee Agency-level implementation of CPI/LSS programs and initiatives and provide support to Components as they execute compatible program initiatives.

2.2.2. Provide the necessary resources and guidance to effect full integration and coordination of CPI/LSS information and capabilities across organizational and functional boundaries.

2.2.3. Assign the Director, CPI Office (DSI) to develop, implement, and manage the CPI program.

2.3. DIRECTOR, CPI OFFICE (DSI). The Director, DSI, under the authority, direction, and control of the Executive Director, DS, shall:

2.3.1. Develop and implement guidance, procedures, performance metrics, and deployment plan for the CPI program, consistent with DoDD 5010.42 and DoDI 5010.43 (References (c) and (d)) and additional guidance approved by the DoD CPI SSC.

2.3.2. Serve as the deployment lead for the Agency, assisting the OIP and its CPI proposal review subcommittee, the Project Proposal Evaluation Panel (PPEP), both in portfolio management and oversight of the overall CPI program.

2.3.3. Provide appropriate representation to the DoD CPI SSC and its supporting bodies as outlined in Enclosure 4 of DoDI 5010.43 (Reference (d)).

2.3.4. Track and report OSD training targets outlined in Enclosure 2 of DoDI 5010.43 (Reference (d)).

2.3.5. Provide local management of DEPMS, OSD's central process improvement project database and knowledge sharing site.

2.3.6. Establish a formal training and mentoring program to give new Belts the training they need to succeed in their CPI efforts, and assist them through completion of their certification projects.

2.3.7. Provide assistance to the OIP, Component Heads, their CPI program support staff, the PPEP, Component Deployment Groups, and Belt practitioners to enhance organizational learning and ensure consistency of approach.

2.4. COMPONENT HEADS. As the Director's principal advisors, Component Heads shall:

2.4.1. Accept full process ownership and employ CPI/LSS tools to help execute and accelerate process improvement through CPI/LSS initiatives and projects consistent with this Instruction.

2.4.2. Assemble a CPI program support structure as outlined in this Instruction (paragraph 3.2.2.).

2.4.3. Attain project and training targets described in this Instruction (paragraph 1.2.5.) ***and Enclosure 2 of DoDI 5010.43 (Reference (d))***.

2.4.4. Ensure Belts are provided adequate time and resources to complete project work.

2.4.5. Report on the progress of key CPI projects, the validated project benefits (monetary and nonmonetary) from completed projects within their purview, and discuss opportunities to replicate process improvements as a regular element in the bi-monthly meetings of the OIP, or as otherwise directed.

2.5. EXECUTIVE DIRECTOR, HUMAN CAPITAL (HC). In order to meet OSD mandates outlined in paragraph 1.2.4., the Executive Director, Human Capital (HC), shall support CPI training by programming and funding student and instructor travel to the extent resources are available. Accordingly, HC shall also arrange for suitably appointed facilities for the training as well as provide for centralized course registration services through the Civilian Training Management System (CTMS).

2.6. CERTIFIED BELT PRACTITIONERS. Certified Belt practitioners are formally trained LSS GB and/or BB employees who have been certified by OSD or another authority, as recognized by the CPI office. Certified practitioners are confirmed to have successfully facilitated one or more "live" process improvement projects that benefit the Agency with measurable results. After receiving formal certification, certified GBs and BBs shall:

2.6.1. Conduct at least one CPI project or event (as described in paragraph 3.3.2.1.), annually.

2.6.2. Conduct at least one local training seminar, or assist in a formal Belt training session (as described in paragraph 3.4.3.), annually.

2.6.3. Mentor at least one GB candidate through their first gated GB-level project (applies to certified BB and ***Master Black Belts (***MBB***)*** only), as described in paragraph 3.4.3.7., annually.

2.7. TRAINED BELT PRACTITIONERS. Trained Belt practitioners are formally trained LSS GB and/or BB employees that have not yet been certified by the CPI Office. After receiving formal training, these practitioners shall strive to become certified Belts (as described in paragraph 3.4.3.).

2.8. EMPLOYEES. Employees should:

2.8.1. Complete Continuous Process Improvement (CPI) Awareness Training, a web-based training program available at https://econnect.dcma.mil/cpittraining. This training is recommended for all employees in the Agency and is a prerequisite for GB training and/or participation on a CPI Project Team.

2.8.2. Utilize the ***Agency Suggestion Box (also known as the*** Continuous Improvement Ideas Identification System (CIIIS)***)***, a Web-based suggestion program available in eTools, to submit ideas, beneficial suggestions, and project proposals. Employees may find the link to CIIIS on the eTools Webpage, or at this web address https://emini.dcma.mil/CPI/index.cfm.

CHAPTER 3

PROCEDURES

3.1. OVERVIEW. LSS is a disciplined process improvement methodology by which the Agency will become more efficient in its operations and more effective in its support to the warfighter. These procedures provide the framework for successful CPI/LSS implementation and the sustainment of a continuous process improvement culture across all organizational levels of the Agency.

3.2. INSTITUTIONALIZING THE CPI/LSS PROGRAM. LSS concepts and tools shall be used at all levels to fully institutionalize CPI within the organization and culture, and to promote transparency of successful CPI projects throughout the Agency.

3.2.1. Implementation Planning. Planning for CPI/LSS implementation requires a top-down deployment strategy supported by effective program management at all organizational levels focusing on:

3.2.1.1. Communication of CPI objectives and promotion of a CPI culture through the use of common CPI/LSS terms of reference and practices.

3.2.1.2. Implementation of fully-vetted team solutions based on fact-based decisions.

3.2.1.3. Collaboration across organizations to minimize duplication of effort and promote full transparency of CPI/LSS activities across the Agency.

3.2.1.4. Communication of project information, opportunities, and results across all functional areas to achieve exponential benefits and ROI.

3.2.1.5. Implementing effective change management techniques as an integral part of the CPI/LSS program and frequently training all hands in change management.

3.2.2. Agency CPI/LSS Management and Support Structure. CPI efforts in the Agency will have an integrated, three-tiered structure to provide strong and continuously visible leadership throughout all levels of the organization to promote a CPI/LSS culture of innovation and teamwork. The senior-most tier is comprised of the DCMA Council, as advised by the Operations Integration Panel (OIP). The second tier resides at the Component level, and the third tier is the local level. The three tiers, their integrated relationships and feedback vehicles, are described as follows:

3.2.2.1. Tier 1: Agency-Level Support Structure. In order to implement a robust, strategically aligned CPI program, the following senior-level elements shall govern the use of Agency resources:

3.2.2.1.1. Operations Integration Panel (OIP). Fully knowledgeable of the strategic goals of the Agency, the OIP exercises sanctioning authority for LSS initiatives for the Agency,

as stated in DCMA Memorandum, "DCMA Corporate Governance Structure" (Reference (g)). Accordingly, the OIP shall act as the Agency's CPI steering committee, by making critical recommendations regarding CPI priorities and resource allocation, initiating and monitoring CPI deployment and culture change, monitoring progress, and addressing organizational barriers that impede progress towards the desired results. The OIP assigns appropriate Process Owners (generally Component Heads) and receives feedback from them on project results. The OIP shall report on the progress of key CPI projects, the validated project benefits (monetary and nonmonetary) from completed projects, and discuss opportunities to replicate process improvements as part of their regular report to the DCMA Council, or as otherwise directed. Projects designated as enterprise-wide will be approved by the DCMA Council prior to being executed by the OIP.

3.2.2.1.2. OIP Project Proposal Evaluation Panel (PPEP). As the working arm of the OIP, this group facilitates identification, development, prioritization, and management of CPI/LSS initiatives for the Agency. The PPEP is comprised of a representative from each of the OIP's primary and executive advisory membership. The OIP shall appoint the PPEP Chair from the primary membership. The facilitator and executive secretary shall be a MBB from the CPI Office. The OIP PPEP also provides a forum for sharing CPI information and collectively helps optimize CPI initiatives across the Agency. The OIP PPEP identifies appropriate Process Owners and receives feedback from them on project results.

3.2.2.1.3. LSS Project Champions. Also called LSS Executive Sponsors (or Project Sponsors), LSS Project Champions provide senior management guidance, resources, and leadership of the CPI/LSS program for the Component. Although Project Champions may exist at all levels of the Agency, it is especially important to have actively engaged, trained LSS Project Champions (Executive Sponsors) at Tier 1, as primary members of the OIP. They accept project ownership and employ CPI/LSS tools to execute process improvement. Project Champions shall take Champion Training, available from the CPI Office (as detailed in paragraph 3.4.3.5.).

3.2.2.2. Tier 2: Region and Component-Level Support Structure. The Tier 2 support structure is comprised of an identified CPI PIO, a Component-specific Deployment Group, trained Project Champions, Process Owners, and trained and certified CPI practitioners. Component Heads shall identify positions to fill the following program roles, as appropriate:

3.2.2.2.1. CPI Performance Improvement Officer (PIO). Serves as the key CPI representative and clearinghouse for CPI/LSS project execution and training compliance for Tier 2. They provide liaison directly with the CPI Office to promote healthy, two-way CPI communication. They specifically work within the Component support structure to identify, execute, and communicate CPI/LSS project replication or collaborative opportunities, and share documented guidance from the CPI Office (e.g., standard operating procedures, regulations, checklists, deployment guidebooks) that define how or when action should be taken by the Component.

3.2.2.2.2. Component Deployment Group. As the working arm of the Component, this group of one or more individuals facilitates identification, development, prioritization, and

management of CPI/LSS initiatives for the Component. The Component Deployment Group also provides a vehicle for sharing CPI information and collectively helps optimize CPI initiatives within its organization and collaborates with other Components. The Component Deployment Group identifies appropriate Process Owners within their purview and receives feedback from them on project results. If identified Process Owners are deemed to be outside of the purview of the Component, such project charters will be forwarded to the OIP PPEP for consideration.

3.2.2.3. Tier 3: Local-Level Support Structure. The local level is comprised of a discrete subcomponent (i.e., CMO, Division, Center) with trained Project Champions, Process Owners, trained and certified CPI practitioners, and additional positions as the Tier 2 CPI PIO deems appropriate to the program. Tier 3 entities with at least 50 persons (such as CMOs and larger Centers) shall formally establish a Performance Improvement Council (PIC) to aid in project prioritization, evaluation, and assignment of appropriate Process Owners. Using their internally-established CPI decision-making structure, the subcomponent identifies appropriate Process Owners within its purview and receives feedback from them on project results. If identified Process Owners are outside of the purview of the subcomponent, such project charters will be forwarded to the Tier 2 Deployment Group for consideration. Tier 3 Process Owners shall report on the progress of key CPI projects, the validated project benefits (monetary and nonmonetary) from completed projects, and discuss opportunities to replicate process improvements as part of their regular report to their Tier 2 Deployment Group, or as otherwise directed.

3.3. CPI/LSS PROGRAM DEPLOYMENT PROCESS. Component Heads, with assistance and support from the CPI Office, shall apply a disciplined CPI deployment approach that is focused on the alignment of goals and priorities throughout their ~~organizations~~ ***Component***. This Instruction identifies processes to select and deploy high priority CPI/LSS projects across the Agency. The elements of an effective CPI/LSS deployment include:

3.3.1. Identification of Strategic Gaps. Aligning the CPI program to the Strategic Plan ensures that Agency goals and priorities are directly addressed through prioritized project selection. Robust performance management methods are essential to identifying performance gaps and problems for resolution using CPI/LSS methods. DCMA shall baseline Agency and/or Component performance against strategic priorities and goals to identify and prioritize performance gaps that should be bridged using CPI/LSS. The recommended method to accomplish this is through a facilitated Project Identification and Selection Workshop (PISW) (see paragraph 3.4.2.).

3.3.2. Project Development, Selection, and LSS Portfolio Management. In accordance with DoDI 5010.43 (Reference (d)) and utilizing their established CPI support structure (as outlined in paragraph 3.2.2.), Component Heads shall work with the CPI Office to establish goals and specify how their projects will be scoped, selected, and managed.

3.3.2.1. Project Scope Development. The basic types of project scopes are as follows:

3.3.2.1.1. Just-Do-Its (JDI). These projects are small in scope, entirely within a low- to mid-level manager's purview and can be implemented without in-depth analysis or benefits

reporting. JDIs include obvious process improvement projects such as a "5S" exercise that organizes a cluttered work area, or a team event designed to update an outmoded spreadsheet or form. JDIs are true projects. They should have formal Charters and be logged into DEPMS, but extensive data collection, documentation, and benefits tracking are not required or expected.

3.3.2.1.2. Rapid Improvement Events (RIE). These projects are also generally small in scope, entirely within a low- to mid-level manager's purview and can be implemented without in-depth analysis or benefits reporting. RIEs are generally 2 to 3 day events where a small team tackles a thorny issue and generates a team solution for Process Owner approval and enactment. RIEs are also true projects. They should have formal Charters and be logged into DEPMS, but extensive data collection, documentation, and benefits tracking are not required or expected.

3.3.2.1.3. Green Belt (GB) Projects. GB projects are generally Component-level initiatives or below. These projects are generally small in scope, and entirely within a mid- to lower-level manager's span of control, but the solutions are not obvious and require some data collection and team analysis using LSS tools, and following the Define-Measure-Analyze-Improve-Control (DMAIC) Tollgate structure. These projects normally use ad hoc teams of subject matter experts that are tasked to improve processes within their immediate ~~organizations~~ ***work group***. GB projects are usually identified, approved, and executed locally, but can be directed from higher authority. In general, GB projects should be simple in scope and take no longer than 90 to 120 days to complete. Employee effort on a GB project is not considered "additional" work primarily because these endeavors are usually devoted to using process improvement tools to get better results within the realm of their normal job duties. As such, this effort should be charged to the process being improved.

3.3.2.1.4. Black Belt (BB) Projects. BB projects are generally Agency-level Initiatives, as defined in Reference (g). These projects are more complex than GB projects, usually having an enterprise-wide or significant cross-functional impact. The solutions to BB projects require in-depth data collection and deep team analysis, using LSS tools. The designated Process Owner for a BB project is generally a mid- to high-level manager or executive, to ensure that the entire project scope (and therefore the executable project solution) lies within their span of control to implement. In general, BB projects take 4 to 6 months to complete. Employee effort on a BB project should be charged to the process being improved.

3.3.2.2. Project Selection and Prioritization. Projects are selected and prioritized based on various factors, including:

3.3.2.2.1. Reliance on data-based performance metrics by establishing performance baselines to identify improvement opportunities for closing gaps.

3.3.2.2.2. Conducting value stream analyses that address all of the potential nodes, interfaces, and activities as they relate to creating or measuring value to the customer and constraints to product flow.

3.3.2.2.3. Continuously aligning and measuring goals at each level of the ~~organizations~~ ***Component*** in order to validate causal relationships, key stakeholder roles and responsibilities, and positive impact up and down the value chain.

3.3.2.2.4. Use of a strategic alignment and implementation of a structured project selection regimen (whether through a PPEP "Benefits and Efforts" review, a PISW as defined in paragraph 3.4.2., some combination of the two, or another disciplined approach), and tailoring project scopes to address the performance gaps.

3.3.2.2.5. Developing a specific "charter for action" at the start of a project that clearly states the current performance gaps and desired outcomes of the project and defines the most effective CPI/LSS improvement approach for each discrete project opportunity.

3.3.2.2.6. Placing high priority on adopting and modifying existing projects rather than relying primarily on new starts.

3.3.2.3. LSS Portfolio Management. Component Heads shall manage their project portfolio based on various key factors, including:

3.3.2.3.1. Identifying key Process Owners and Project Champions who are empowered and accountable for achieving project success, as well as selecting employees with high potential who are best suited to lead and execute projects. It is equally important to gain concept approval (buy-in) by each project's properly identified Process Owner, key stakeholders, and supporting project team.

3.3.2.3.2. Ensuring resources (funding and human capital) have been allocated or can be allocated for CPI/LSS initiatives from project selection through implementation.

3.3.2.3.3. Assessing the portfolio of active projects every 6 months to confirm that adequate progress is being made and establishing indicators for terminating CPI/LSS projects when successes and/or progress is not being achieved.

3.3.2.4. Project Completion. Completed projects that generate discernible benefits over time are the best determiner of a successful CPI/LSS program. Actions that promote project completion include:

3.3.2.4.1. Setting realistic and attainable project completion dates through consultation with champions, stakeholders, subject matter experts, and customers.

3.3.2.4.2. Continuously reassessing progress against planned project results and completion dates and resetting as needed. Ideally, this reassessment should occur at the project's 180-day mark, and again at the 1-year mark, for both completed and on-going projects.

3.3.2.4.3. Incorporating the requirement to apply CPI/LSS principles and techniques in DoD contracts and partnering arrangements whenever practicable.

3.3.3. Benefits Tracking and Reporting Results. Component Heads shall work with the CPI Office to establish well defined, credible benefit targets for each approved project. Component Heads shall also use CPI/LSS to benchmark improvement efforts and cross-fertilize application of best practices across organizational boundaries. The benefits tracking and results reporting process is characterized by:

3.3.3.1. Establishing a baseline.

3.3.3.2. Categorizing projected benefits into categories such as performance improvement, savings, cost reduction, and customer satisfaction.

3.3.3.3. Developing quantifiable benefit targets for tangible benefits.

3.3.3.4. Establishing a mix of readily attainable and challenging benefits targets.

3.3.3.5. Regularly assessing progress toward achieving benefits targets and re-evaluating targets upward or downward, as appropriate.

3.3.3.6. Consistently tracking attainment of benefits targets, maintaining auditable historical records of target achievements, and reporting results.

3.3.3.7. Conducting a validation review after the final Control phase of a project is completed. Follow-on validation reviews are to be conducted at 6-month intervals. These reviews allow the Component Head to assess whether anticipated savings are being realized, and determine the soundness of applying successful improvements beyond the scope of the original project (this is also called "replication"). Component Heads shall brief the results of their validation reviews and decisions to replicate to the OIP, as appropriate.

3.4. CONSISTENCY OF APPROACH. DCMA shall use DoDD 5010.42 and DoDI 5010.43 (References (c) and (d)), as well as OSD's formal LSS Body of Knowledge as outlined in Reference (f), as a common set of standards for training, certification, deployment, and operational approaches for implementation and execution of CPI/LSS across the Agency.

3.4.1. CPI/LSS Fundamental Concepts. Component Heads, with assistance and support from the CPI Office, shall employ the fundamental concepts and core competencies of CPI/LSS, and other CPI methodologies that are commonly used throughout the DoD, as part of a structured approach for analyzing and improving their processes to accomplish their organizational mission more efficiently and effectively on a continuing basis. A robust, effective CPI/LSS program will leverage the right tools and methods for problems being addressed, including LSS, Theory of Constraints, and Business Process Reengineering.

3.4.2. Project Identification and Selection Workshop (PISW). At least annually, the CPI Office shall facilitate this high-energy, nuts-and-bolts LSS event for the OIP, Agency PPEP, and other Agency leaders and change agents, as appropriate. The PISW is an 8- to 24-hour tailored event, specifically designed to help participants translate their organizational performance gaps into executable project charters. Due to the strategic nature of the event, this workshop is

conducted in collaboration with the Strategic Effects Directorate, to ensure consistency with current and future strategic direction. At the completion of the workshop, a participant will have a practical, prioritized list of LSS projects tailored to address his or her organization's strategic goals. The PISW can also be tailored and conducted at lower levels of the Agency, to the extent resources are available.

3.4.3. Training Courses and LSS Certification. The CPI Office shall design and deploy a consistent, multi-faceted organic training program to progressively train the Agency workforce. DoD CPI/LSS Program Office training courses and certification standards shall be used to ensure full consistency of program content, to ensure cross-organizational acceptance of recognized core competencies (certification reciprocity), and promote enterprise teaming and projects.

3.4.3.1. CPI/LSS Awareness Web-Based Training. This training covers the basic concepts of CPI and LSS. It takes approximately 2 hours to complete. It is recommended for all employees, but is required for anyone who has signed up for LSS Champion, GB, or BB Training, or the PISW. In addition, all CPI project participants are required to take this training.

3.4.3.2. LSS Green Belt (GB) Training. GBs are functional subject matter experts ~~in an organization~~ who facilitate CPI projects on a part-time, ad hoc basis. LSS GB training is a 40-hour, OSD-developed on-site course that teaches the GB candidate how to facilitate improvement events using CPI concepts and LSS tools. This course also covers the mandatory OSD requirements for loading, tracking, and reporting Agency event information using the web-based DEPMS. Upon completion of the classroom training and successfully passing a comprehensive exam, students are considered to be OSD-Trained GBs.

3.4.3.2.1. How to Apply for GB Training. GB candidates must sign-up for a DCMA-run offering through CTMS. The GB course is taught in-house by the CPI Office. Limited training is also available through OSD on a space-available basis. The CPI Office shall have at least three certified BBs on-staff in order to teach the OSD LSS GB course, as well as mentor GBs through project completion. More detailed information and recommended prerequisites for GB training may be found on the CPI Webpage.

3.4.3.2.2. How to Attain GB Certification. To become GB certified, fully-trained GB candidates must complete one GB-level DMAIC gated project (appropriately formatted, uploaded, and approved in DEPMS) that demonstrates measurable results. The objective of this project is to obtain official OSD LSS certification as well as garner measurable process improvements for the Agency.

3.4.3.3. LSS Black Belt (BB) Training. BBs are LSS practitioners who have acquired advanced training in CPI methodology and tools. They facilitate larger-scale projects on either a part-time or full-time basis, mentor GBs, and provide just-in-time training to project teams. LSS BB Training is a 120-hour, OSD-developed on-site course that teaches the BB candidate how to facilitate improvement events that cross major organizational boundaries within our Agency, using advanced CPI concepts and LSS tools. LSS GB training is a mandatory prerequisite for BB enrollment. Upon completion of the classroom training and successfully passing a comprehensive exam, students are considered to be OSD-Trained BBs.

3.4.3.3.1. How to Apply for BB Training. BB candidates must sign-up for a DCMA-run offering through CTMS. The BB course is taught in-house by the CPI Office. Limited training is also available through OSD on a space-available basis. The CPI Office shall have at least two certified MBBs on-staff in order to teach the OSD LSS BB course as well as mentor BBs through project completion. More detailed information and mandatory prerequisites for BB training may be found on the CPI Webpage.

3.4.3.3.2. How to Attain BB Certification. To become BB certified, fully-trained BB candidates must complete two BB-level DMAIC gated projects (appropriately formatted, uploaded, and approved in DEPMS) that demonstrate measurable results. The objective is to obtain official OSD LSS certification as well as garner measurable process improvements for the Agency. Certified BBs shall provide training and mentoring to GB certification candidates.

3.4.3.4. LSS Master Black Belt (MBB) Training. MBBs are CPI experts who lead DoD enterprise-level projects and disseminate advanced LSS knowledge and training. In a mature organization, PIOs in significant roles at Tier 2 are certified MBBs. OSD currently has no mandatory targets for MBB training; therefore, no in-house curriculum has been established. Limited training is available through OSD on a space-available basis. Certification as a BB is a minimum prerequisite for MBB training. More detailed information and other prerequisites for MBB training may be found on the CPI Webpage.

3.4.3.5. LSS Champion Training. Champion candidates are Process Owners throughout all levels of the Agency that enable, and stand to benefit the most from, CPI engagement in the workplace. Candidates for this training include Component Heads, Process Owners (at all levels), Project Champions, PPEP members, Tier 2 PIOs and Tier 3 PIC Chairs. Supervisors of Belt practitioners and potential Belt candidates are also considered prime candidates for this training. LSS Champion Training is a 12-hour, DCMA-focused, on-site course that provides a foundational understanding of OSD's CPI Program, insight into how the program is being rolled out within the Agency, and instruction in how to properly identify and scope potential projects and events. Champion candidates must sign-up for a DCMA-run offering through CTMS. The Champion course is taught in-house by the CPI Office.

3.4.3.6. Reciprocity. The CPI Office shall examine GB, BB, and MBB certificates issued by non-OSD entities on a case-by-case basis. Due to the Agency-specific nature of the Champion course material, there is no reciprocity for this training. Determinations made by the CPI Office on applicability towards meeting OSD training targets are considered final.

3.4.3.7. Mentoring. The CPI Office shall oversee a robust mentoring program to aid candidates in project completion, and thereby attaining GB and BB certification. All mentors shall be certified BBs at a minimum. Ideally, each Component shall have cultivated at least one or more in-house, certified BB, so that the Component will be able to mentor its own GB candidates. However, until sufficient numbers of certified BBs are attained, Component Heads with certified BB mentors are expected to support their certified BBs in mentoring GB candidates from other Components until such time that all Components achieve the OSD targets (see paragraph 1.2.5.).

3.4.4. Communication Plan. Good communication between and within all levels of the Agency is essential to ensuring consistency in approach. Component Heads shall ensure that:

3.4.4.1. All CPI/LSS program participants have a full understanding of the Agency's mission, vision, and strategy and must align their CPI efforts to these elements.

3.4.4.2. CPI successes are broadcast though various communications formats available throughout the Agency.

3.4.4.3. A climate exists that encourages open, two-way communication among all members of the CPI/LSS leadership, support teams, and work groups.

3.5. CPI/ LSS INTEGRATION. Demonstrated performance improvements and results achieved as an outcome of CPI/LSS projects shall be documented and maintained in an automated, accessible, transparent fashion for purposes of management review, assessment, research, knowledge sharing, and historical reference. The DEPMS provides the Agency with a structured knowledge management and information sharing capability to foster the CPI/LSS program. This focus on program integration will increase cross-fertilization of CPI/LSS ideas and adopted DoD-wide business practices.

3.5.1. Project Tracking. Project tracking elements in DEPMS include a description of the project, its purpose, objectives, participating organizations, planned activities and related milestones, planned and actual costs, planned and actual benefits (business case), scope of functions involved, and expected results.

3.5.2. Project Replication and Collaboration. The CPI Office shall enable Components to accomplish maximum sharing and reutilization of successful CPI/LSS projects among ~~organizations~~ ***work groups*** with similar process improvement objectives through the use of DEPMS as an Agency-wide project repository and searchable database. Components shall work collaboratively whenever practicable to combine resources and expertise into joint CPI/LSS teams to achieve common-use project outcomes.

3.5.3. Operational and Financial Benefits. Components shall take full advantage of leadership's commitment to permit resource benefits resulting from CPI/LSS improvements to be retained by the generating Component(s) by:

3.5.3.1. Continuous liaison with financial staffs to assist with and support the structuring and validation of CPI/LSS resource benefits and investments.

3.5.3.2. Linking planned initiatives to reinvest, recapitalize, or further strengthen operational capability, using documented CPI/LSS generated resources in Component programming and budget submissions.

3.5.3.3. Specifically identifying CPI/LSS projects, either within a Component or across multiple Components, in programming and budget submissions as a basis for increasing the

fiscal priority of such projects in programming, budget development, submissions, and reviews. Increasing fiscal priority is justified since such projects cost less and produce more.

3.5.4. CPI/LSS Symposiums. The CPI Office shall participate in OSD's annual symposium, sponsored by the DCMO, to the extent resources are available. These symposiums provide opportunities for DoD-wide exchange of ideas, methods, technology solutions, and experiences. They also provide available updated guidance and direction from senior management officials and knowledgeable CPI/LSS experts.

3.5.5. CPI/LSS Recognition and Rewards Program. Recognition of successful CPI/LSS projects is an essential element of encouraging and publicizing the extension of an improvement-oriented culture in the Agency. Components shall establish multi-level rewards, awards, and recognition programs across the enterprise for individuals and organizations to:

3.5.5.1. Reward successful teams and key individuals to encourage greater interest and commitment to the CPI/LSS program, especially when the results are seen to be greater than the sum of their individual efforts or capabilities.

3.5.5.2. Demonstrate leadership commitment in promoting results-driven CPI efforts.

3.5.5.3. Highlight new ideas and encourage innovation among the workforce.

3.6. HUMAN CAPITAL (HC). HC shall take all appropriate actions to support employees and leadership in their role to take full ownership of the Agency's continuing emphasis on process improvement, to the extent resources are available.

3.6.1. Personnel Retention and Recruitment. HC shall support CPI/LSS mission accomplishment by:

3.6.1.1. Including CPI/LSS levels of competency certifications in official personnel records, in accordance with DoDI 5010.43 (Reference (d)).

3.6.1.2. Developing recruitment activities to support DoD efforts to attract employees with the right CPI/LSS skills.

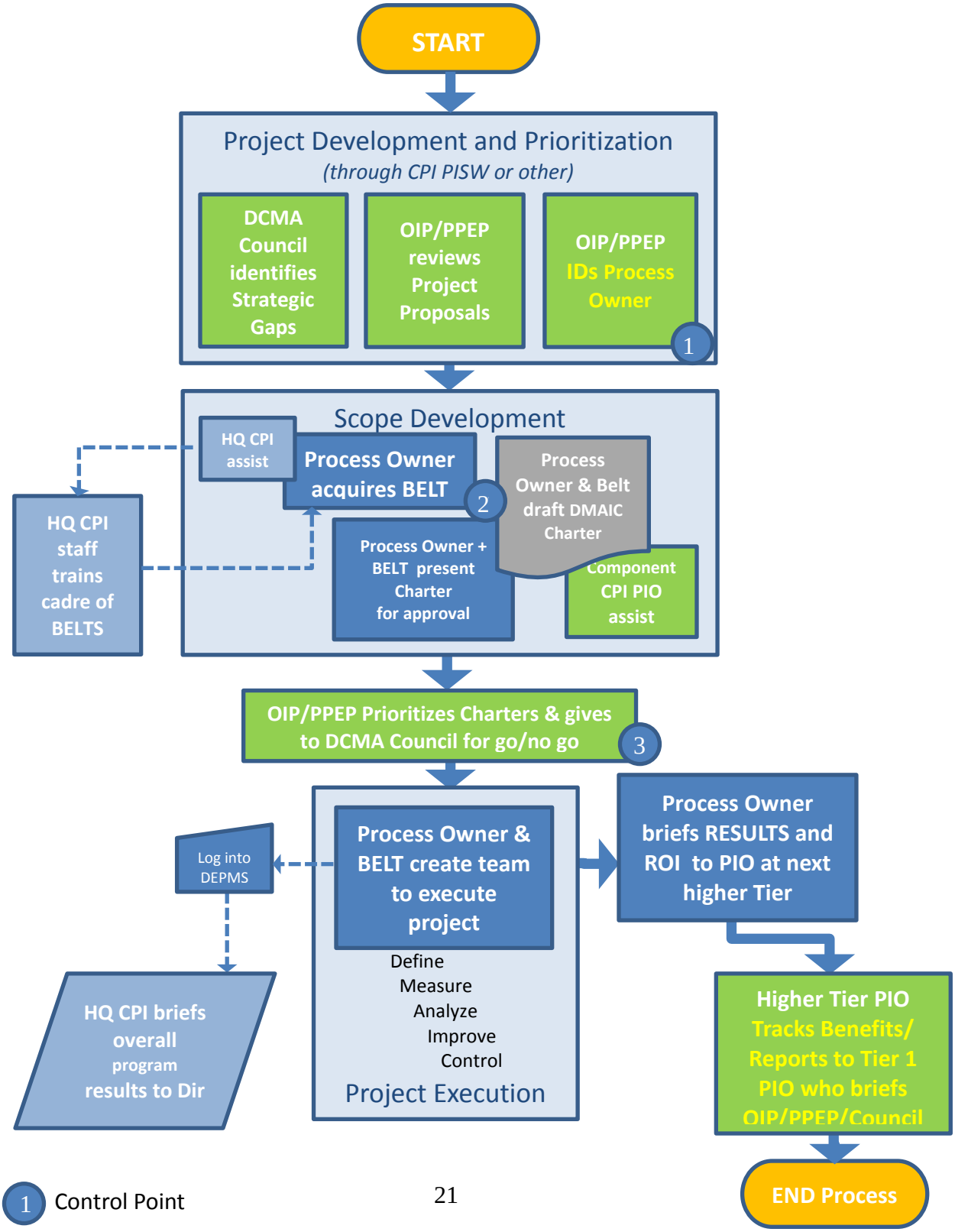
3.6.2. Workforce Training. A well trained workforce will help ensure a successful CPI/LSS program that improves organizational performance. To this end, HC shall:

3.6.2.1. Ensure sufficient levels of investment in training programs and budgets to develop and maintain DoD-mandated numbers of CPI/LSS trained personnel, in accordance with DoDI 5010.43 (Reference (d)).

3.6.2.2. Incorporate CPI/LSS into individual employee development programs and, as appropriate, encourage management to include results delivered from CPI/LSS projects as an evaluation factor in employee performance appraisals, in accordance with DoDI 5010.43 (Reference (d)).

APPENDIX A

PROCESS FLOWCHART



1 Control Point

GLOSSARY

DEFINITIONS

5S. A process improvement tool that involves a series of five steps to unclutter a work area in order to make a process more efficient. The original five Japanese terms (seiri, seiton, seiso, seiketsu and shitsuke) roughly translate to five American terms: sort, set-in-place, shine, standardize, and sustain.

Business Process Reengineering. The fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical contemporary measures of performance, such as cost, quality, service, and speed.

Component. As defined in Reference (g), this is "a term used to describe each of the distinct organizational elements of DCMA (i.e., office, directorate) whose leader reports directly to the Director, DCMA."

Component Deployment Group. As the working arm of the Component, this group of one or more individuals facilitates identification, development, prioritization, and management of CPI/LSS initiatives for the Component. See para. 3.2.2.2.2.

Component Head. As defined in Reference (g), this is "the head of a DCMA Headquarters organization (office or directorate) that reports directly to the Director, DCMA."

DCMA Council. As defined in Reference (g), this is "the senior forum for the final intra-agency coordination and deliberation on agency-level issues, including agency budget and finance decisions, strategic planning, resource allocation, policy and program development, and performance management."

Lean. A methodology for continuous process improvement, focused on work flow, customer value, and eliminating process waste; unique from traditional process improvement strategies in that its primary focus is on eliminating non-value added activities.

Operations Integration Panel. As defined in Reference (g), this is the Mission Support Panel that specifically "coordinates and vets processes and policy changes surrounding contract administration services, and exercises sanctioning authority for Integrated Process Teams and Lean Six Sigma initiatives."

Performance Improvement Officer (PIO). This individual serves as the key CPI representative and clearinghouse for CPI/LSS project execution and training compliance for their organization.

Process Owner. The individual(s) responsible for the entire process being improved (end-to-end), as well as the implementation of all approved process changes. The Process Owner meets with the Belt practitioner and the team as needed, and supports the team by creating an

environment that enables the necessary changes to be made on time and within budget. The Process Owner actively supports the project and formally signs off on Project Tollgates. The Process Owner generally does not serve as a Team member, but empowers the team to collect data and conduct pilots, etc.

Project Champion (also called an Executive Sponsor or Project Sponsor). A senior-level executive who has an overarching interest in a project's success. The Project Champion is generally one echelon senior to the Process Owner, or can elect to serve double-duty as the Process Owner. He or she offers assistance, encouragement, and financial resources, and is also able to break down any barriers to project success and remove disruptive team members, if required.

Six Sigma. A disciplined, data-driven methodology for process improvement that focuses on satisfying customer requirements while minimizing waste by reducing and controlling process variation.

Theory of Constraints. A systematic approach to optimize resource utilization by identifying, exploiting, subordinating, elevating, and reassessing constraints in the process. Scientific principles are applied as a set of logical thinking processes to develop transformational breakthrough business solutions. A constraint is any resource whose capacity is less than the demand placed upon it. Theory of constraints attacks constraints and barriers (a restriction or other block to increases in output).

GLOSSARY

ACRONYMS

BB	Black Belt
CIII	Continuous Improvement Idea Identification
CIIIS	Continuous Improvement Ideas Identification System
CPI	Continuous Process Improvement
CTMS	Civilian Training Management System
DCMA-INST	DCMA Instruction
DCMO	Deputy Chief Management Office
DEPMS	Defense Enterprise Performance Management System
DMAIC	Define-Measure-Analyze-Improve-Control
DoDD	DoD Directive
DoDI	DoD Instruction
DS	DCMA, Corporate Support
DSI	DCMA, Corporate Support, Continuous Process Improvement Office
GB	Green Belt
HC	DCMA, Human Capital
JDI	Just-Do-It Projects
LSS	Lean Six Sigma
MBB	Master Black Belt
OIP	Operations Integration Panel
OSD	Office of the Secretary of Defense
PIC	Performance Improvement Council
PIO	Performance Improvement Officer
PISW	Project Identification and Selection Workshop
PLAS	Performance Labor and Accounting System
PPEP	Project Proposal Evaluation Panel
RIE	Rapid Improvement Events
ROI	Return On Investment
SSC	Senior Steering Committee