|  |  |
| --- | --- |
| Exelis_use for header_New.jpg | **Geospatial Systems** |
| **Document Number:**  | CML-0200-01 | **Rev:** | - |
| **Document Title:** | **Page:** | 1 of 5 |
| Integrated Product Lifecycle | **Supersedes:** |
| **Point of Contact:** | Vince D’Alessandro | See Section 8.0 |

# Purpose

This document provides an overview of the Integrated Product Lifecycle (IPL) work flow. It shows a representation of a typical sequence of minimum required business gates and technical milestones that apply to airborne and space type products that give guidance to producing premier quality product.

# Scope

The IPL applies to airborne and space type products and customers. The gates and milestones may be tailored (CML-0200-01-016) to the needs / requirements of the product and/or customer. Each gate and milestone is required to be reviewed for every product / customer for any specified minimum required deliverables. Gates or milestones may be repeated (delta), combined or sequence adjusted as needed per the Integrated Management Plan (IMP). The milestones can occur at the system level, assembly level, sub-assembly level, deliverable product, engineering units, prototype, etc. Any tailored omission is to be justified in writing as part of the IMP or IPL tailored Roadmap for the program.

The scope of this document is a high level overview of the overall IPL work flow and provides a general description of the activities carried out during the various phases. The 0200 IPL process area includes the Tier 3 and Tier 4 documents for conducting the Milestone Reviews and instructions for tailoring the work flow. For more detailed work flow information see process areas 0201 Sales & Business Development, 0202 Product Development, 0203 Operations Product Build & Verification and CML-0200-01-020 Proposal-Program Closure and Post Delivery Support.

Post Delivery support of product will use existing processes and procedures unless otherwise specified by the customer or contract.

Measures of Effectiveness (MOE) and targets are listed on the IPL work flow. For the cases where a MOE falls into the yellow or red range, the countermeasure would be to address the condition and return to green plan to the GS leadership team at the monthly business review.

# Associated Documents

| Document Number | Title |
| --- | --- |
| CML-0200-01-001 | How to Conduct IPL Milestone Reviews |
| CML-0200-01-001-02 | Integrated Product Lifecycle (IPL) Workflow Training |
| CML-0200-01-016 | How To Tailor the Integrated Product Lifecycle |
| CML-0200-01-020 | How to Close an IPL Proposal or Program |
| CML-0201-21 | Opportunities (Proposals) and Programs Workflow |
| SSD-0202-01 | Integrated Product Development Workflow |
| SSD-0203-01 | Operations Product Build and Verification Workflow |

# Superseded Documents

| Document Number  | Title |
| --- | --- |
| SSD-0200-01 | SSD Integrated Product Lifecycle |

# Change Table

| Rev. | Section | Changes Made / Point of Contact for Change | Date |
| --- | --- | --- | --- |
| - | All | Initial Release per Vince D’Alessandro. (Replaces SSD-0200-01 moved to CML Level). | 01/22/2014 |
|  |  |  |  |
|  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *1* | **Functional Areas Involved** | *2* | **Inputs** | *3* | **Outputs** | *4* | **Measures of Effectiveness** | *5* | **Target of Measurement** |
|  | * TCAM-Methods Management
* Center for Innovation & Technology Development and Corporate Planning
* Engineering Operations
* Operations
* Resource Management PAs
* Business Areas
 |  | * Idea
* Business Opportunity
* Customer Request
 |  | * Delivered Product and / or Service
* Signed PCR Checklist
 |  | * Product Delivered on Schedule (SPI)
* Product Delivered on Budget (CPI)
* Customer Satisfaction/Experience (Award Fee Score)
 |  | SPI and CPI: R: SPI or CPI < 0.98 Y: 0.98 ≤ (SPI, CPI) < 1.00 G: 1.00 ≤ (SPI, CPI)Hardware Contract Award Fee: R: Award Fee Score < 70% Y: 70% ≤ Award Fee Score < 80% G: 80% ≤ Award Fee Score |



# General Description of IPL Task Activities

## Strategy & Offering Dev, Sales & Business Dev

Work to be completed to process a captured idea, customer request or business opportunity through submission of a proposal to a customer.

## Launch Program

### Identify the core team members and leaders and create key program and technical management plans.

### Builds on the Business Development Plan and the information derived from the Concept Identification phase of the project.

### Create the Integrated Management Plan (IMP) and review the lessons learned from previous projects.

### Management review of cost and key milestone schedule plans.

## Capture and Allocate System Requirements

Extend the system requirements definition to include all users and derived requirements. Allocate requirements to subsystems, hardware configuration items (HWCI), computer software configuration items (CSCI), and human operations for the set of architectures under consideration. Evaluate the complexity of the architecture and the performance for several candidate architectures resulting in a selected architecture. Perform SW and HW requirements analysis in support of the selected SW and HW architectures. Assess the level of maturity of each requirement.

## Develop Integrated Master Schedule (Resource Loaded)

Develop a resource loaded integrated master schedule.

## Critical Items Architecture Selection and Allocation

Define the architectural solution to the requirements defined in the Capture & Allocate System Requirements task.

## Architecture Selection and Allocation

Define the architectural solution to the requirements defined in the Capture & Allocate System Requirements task.

## Implementation Definition

Develop the approach for implementing the individual subsystems of the selected SW and HW architectures. Perform design related tradeoffs to arrive at the selected preliminary designs in support of the architecture definitions.

## Final Design & System Integration and Test

Complete system and conduct prototype testing.

## Prepare for Product Build

Activities necessary for successful product build and verification

## Prepare for Mission Operations

Work to be completed for Mission Operations.

## Prepare for Product Test

Work to prepare for test readiness.

## Verify Functional Performance

Assure that the completed system is consistent with its documentation and satisfies all the functional requirements.

## Prepare Ship Package

Prepare the end item and its documentation (readiness for delivery) for packaging and transportation procedures.

## Ship Package

Activities required to ship product to its destination.

## Proposal/Program Closure

Closeout of proposal/program due to: lost proposal, closure of a complete program, a Down Selection, early program termination or shutdown of program(s) due to an order from a regulatory or government agency.

## Post Delivery Support

Activities that occur once the product has been accepted as delivered by the customer