

NDIA IPMD Predictive Measures Guide Update

Summary of Changes April 2021

Thanks to the team

One year spent reviewing the document, gathering industry input, and making updates. **86 comments received.**

Many thanks to section leads -

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National Defense Industrial Association
Integrated Program Management Division

A Guide to Managing Programs Using Predictive Measures

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Revision 3

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Summary of Changes

Section by Section Summary

Summaries were created for each section in order to detail where specific metrics can be located in the guide - along with their definition and relationship to other metrics.

2 Schedule Metrics

Section Summary

Schedule Metric	Full Name	Summary	Relationship to Other Metrics	Found in Section:
SPI	Schedule Performance Index	Measure of demonstrated schedule performance, using traditional EV data, which can be used as a comparison for future projections	Similar to: BEI, <u>SPI_t</u>	2.1
BEI	Baseline Execution Index	Measure of demonstrated schedule performance, using task counts, which can be used as a comparison for future projections	Similar to: SPI, <u>SPI_t</u>	2.2
CPLI	Critical Path Length Index	Measure of the risk associated with meeting a downstream deadline	Similar to: TFCI	2.3
CEI	Current Execution Index	Measure of near-term schedule forecast accuracy	No close relationship	2.4

Summary of Changes

Updated Tables & Figures:

Tables and figures were updated throughout the guide in order to provide updated dates and improved quality.

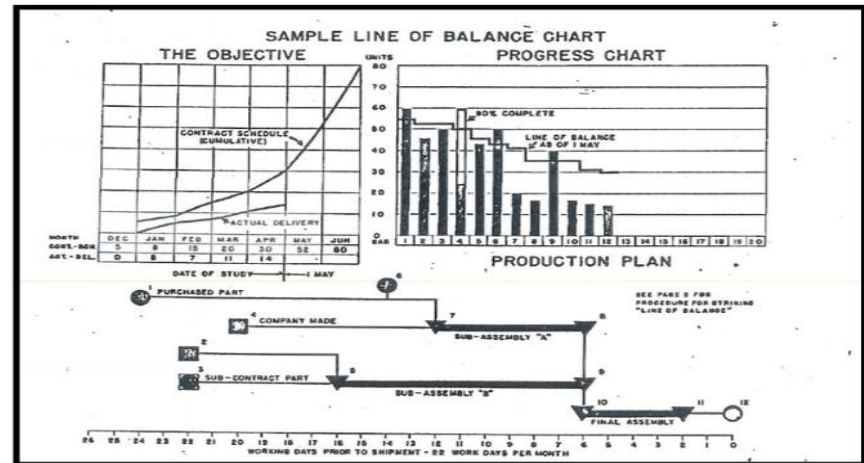


Figure 48. Line of Balance Plot

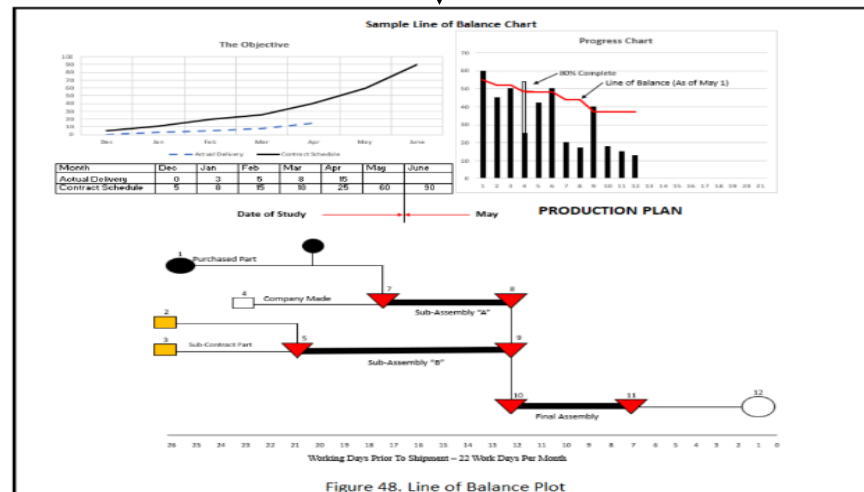


Figure 48. Line of Balance Plot

Summary of Changes

Additional Sections Incorporated:

Additional metrics were added or removed in the following sections

- Scheduling
- Contract Mods
- Requirements
- Product Roadmap

7.2 Product Roadmap Completeness Measure

Metric Definition

Product Roadmap Completeness Measure involves monitoring the features documented in the program's roadmap. The features should represent the means to meet the objectives documented in the contract. Each feature within the roadmap should be monitored for completeness, as well as the holistic roadmap completion. This measure compares planned feature completion with actual feature completion.

Calculations

The base measures are:

- The physical count of all features and all epics in the roadmap.
- The physical count of the sum of the "weight" (stories / story points) of all features and epics in the roadmap.

The basic algorithms are:

$$\text{Roadmap Actual \% Complete} = \frac{\text{Features + Epics Completed}}{\text{Total Feature + Epic Count}}$$

$$\begin{aligned} \text{Roadmap Weight Actual \% Complete} \\ = \frac{\text{Sum of Feature + Epic Story Points Completed}}{\text{Sum of Total Feature + Epic Story Point}} \end{aligned}$$

Summary of Changes

Refined Writing &
Improved Questions:

Each section was thoroughly reviewed to improve clarity and additional questions were included to add depth to each section.