

# Results of Estimating and Reporting Agile Projects Workshop



Glen B. Alleman  
Thomas J. Coonce

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Environment*  
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## Workshop Purpose (Learning Objectives)

- Understand the difference between the Agile mindset and the Agile process
- Understand the difference between estimating an Agile project prior to contract award and after contract award and the importance of using reference class data for both
- Understand that owners must include a clear CONOPS, a notional set of features and relative priorities in their Request for Proposals (RFPs)
- Understand how the implementing contractor should develop a plan
- Understand how to use Earned Value to determine if the owner features are being delivered according to plan

# Participants

Name	Organization
Anthony Powell	York Metrics, Ltd
Glen Alleman	Niwot Ridge Consulting
Greg Holland	Rolls-Royce
Greg Niemann	Lockheed Martin
Jessica Rakawkes	U.S. Army ARDEC
Joe Dean	Gallorath, Inc.
Lyle Patashnick	NGA
Malini Puli	Northrup Grumman Corp
Mauricio Aguiar	Timetricas
Mike McLenden	SEI
Robin Yeman	Lockheed Martin
Sean Escobar	Air Force Cost Analysis Agency
Timmie McArthur	Aerospace Corporation
Tom Coonce	Institute for Defense Analyses

# Covered Topics

- Agile mindset vs the agile (scrum) process
- Decomposition of owner capabilities into features, stories, and tasks
- Owner capabilities and features should use historical data to estimate total cost and duration
- Contractor should estimate features using their own historical cardinal data (preferably hours by features; not by stories)
- Feature implementation plans per the agreed roadmap are placed into the Integrated Master Schedule
- Progress is recorded on feature completion
- Earned Value Management data should be used to score progress against plan and determine estimates at completion

# General Agreements

- Lots of confusion about Agile terms
- Government customers are typically not clear about needed capabilities, only vague statements of objectives. Government should provide in RFP
  1. Clearly stated capabilities for needed budget and time
  2. Draft roadmap of those Features laid out in needed order
  3. Draft high-level plan for those Features
- Contractors' phased cost plan (Budgeted Cost of Work Scheduled) should be the contractor negotiated cost straight-lined over the planned duration

## General Agreements (Concluded)

- Using historical stories and story points and hours to estimate future efforts makes little sense to estimate prior to contract award since
  - Government will not know projected stories or story points for targeted agile project. They will only know capabilities and features
  - Stories and story points are ordinal and subjective and not comparable across contractors
- Measuring progress on features delivered makes sense
- OK to use hours or stories planned vs to go to measure feature progress

## Agreed Principles

- Agile estimating must use Reference Class data
- Government must have Concept of Operations, Product Road, and Release Plan in RFP
- Progress is measured at the Feature level as Physical Percent Complete

## What's Next

- Integrate agreed Agile Principles into the PSM Guide