National Ecological Observatory Network

NEON Project Schedule

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NEON Project Schedule Discussion

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Schedule Stats

- Software: Primavera v6.2
- Construction Phase: 10/1/2010 – 9/30/2015
- Current Schedule Span: 5/1/09 – 9/30/2015
- 6420 Tasks (996 = Planning Packages)
- 7713 Relationships
- 580 Total Milestones identified (10%)
- Schedule is a living document

Milestones

- Three levels of Milestones defined for the NEON Project:
  - Level 1 – reporting to NSF
  - Level 2 – reporting to Project Manager (includes L1)
  - Level 3 – reporting to the Product Team Lead (includes all L1 & L2)
- Identified in collaboration with PTLs and Project Management
- Distributed across project teams and project timeline

Characteristics

- Schedule frozen for FDR on 10/16/09 (2)

- Working version of the schedule (R1) continues to be refined

- Fully detailed schedule provided in NEON.MGMT.NPR.000012.PLA.C - NEON Project Schedule

- All WBS components and all domains/sites represented in one integrated master schedule

- Schedule also includes details of Design & Development and the AOP DVU – both isolated in separate WBS elements

- Resource loaded at the task level excepting LOE areas

Characteristics

- Schedule contingency called out in discrete tasks throughout the schedule and applied at different levels based on assessed risk – this approach is going to be updated post FDR

- Current proposed sequencing provides a plausible rollout schedule but is not fixed

- The schedule is modular – i.e. domain builds are interchangeable

- Some product teams are independent of the core domain construction schedule:
  - FSU
  - AOP
  - DPS

Schedule Management

- Planning meeting bi-annually to determine upcoming domain builds –12 to 18 months in advance
- Schedule to be analyzed and resource leveled ~6 months in advance of next years worth of work
- Schedule contingency managed by the Project Manager
- PMCS team to work one-on-one with PTLs and construction managers to:
  - Status their schedule
  - Produce variance reports
  - Identify risks, issues, mitigation strategies
  - Level resources

Earned Value

- Earned Value Reporting will be a key tool for management of the NEON Construction Project

- A CPR and variance report will be generated monthly that includes the following metrics:
  - Budgeted Cost of Work Scheduled (Budget)
  - Actual Cost of Work Performed (Actuals)
  - Budgeted Cost of Work Performed (EV)
  - Cost Performance Index (CPI)
  - Schedule Performance Index (SPI)
  - Cost Variance (CV)
  - Schedule Variance (SV)
  - Estimate at Completion (EAC)
  - Estimate to Completion (ETC)

- Multiple methods for determining EV will be used based on the task type (50/50, % complete, etc.)

Earned Value

- Team leads, in collaboration with Project Management, will be responsible for reporting on and mitigating any issues identified
- Stoplight status threshold will be established as follows:

	CPI	CV	SPI	SV
Green	>.95	<5%	>.95	<1 month
Yellow	.90-.949	5%-10%	.90-.949	1-2 month
Red	<.90	>10%	<.90	>2 month

Next Steps

- Revise based on new contingency strategy
- Customize domain schedules based on updated knowledge of permitting, construction characteristics
- Finalize and implement procurement activity strategy
- Need to audit Level 2 and Level 3 milestones coding
- Need to update Risk Register activity IDs to map to new activity IDs
- Execute proof of concept for EVM

Housekeeping

Design & Development

- **CI: spread out and level resources**
- **FIU:**
    - **Decrease and level resources**
    - **Move Definition to command and control task**
- **ENG: Add detail in building, testing and shipping sensor assemblies**
- **CYI Domain Network Infrastructure:**
    - **add aquatic sites,**
    - **summarize tasks,**
    - **increase Circuit Provision lead time task,**
    - **revise logic**
- **System Engineering: Add milestones**
- **FCC:**
    - **Re-work tower logic to clarify who builds what,**
    - **Update Alaska RTS schedules**
    - **Update construction calendars**
- **Aquatic : Move GPS Site Verification task to bridge**
- **FIU: clean-up logic .**
- **MDP: Review resource allocation. Need to fix delivery to ops unit 6 link error fixed**
- **General: Minor one-off logic fixes**

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