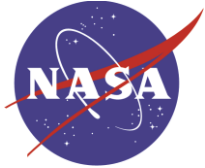


Project Management Capability Survey Assessment/Results

Kristen Kehrer, KSC EVM Focal Point

Jeff Kottmyer, GSFC EVM Lead

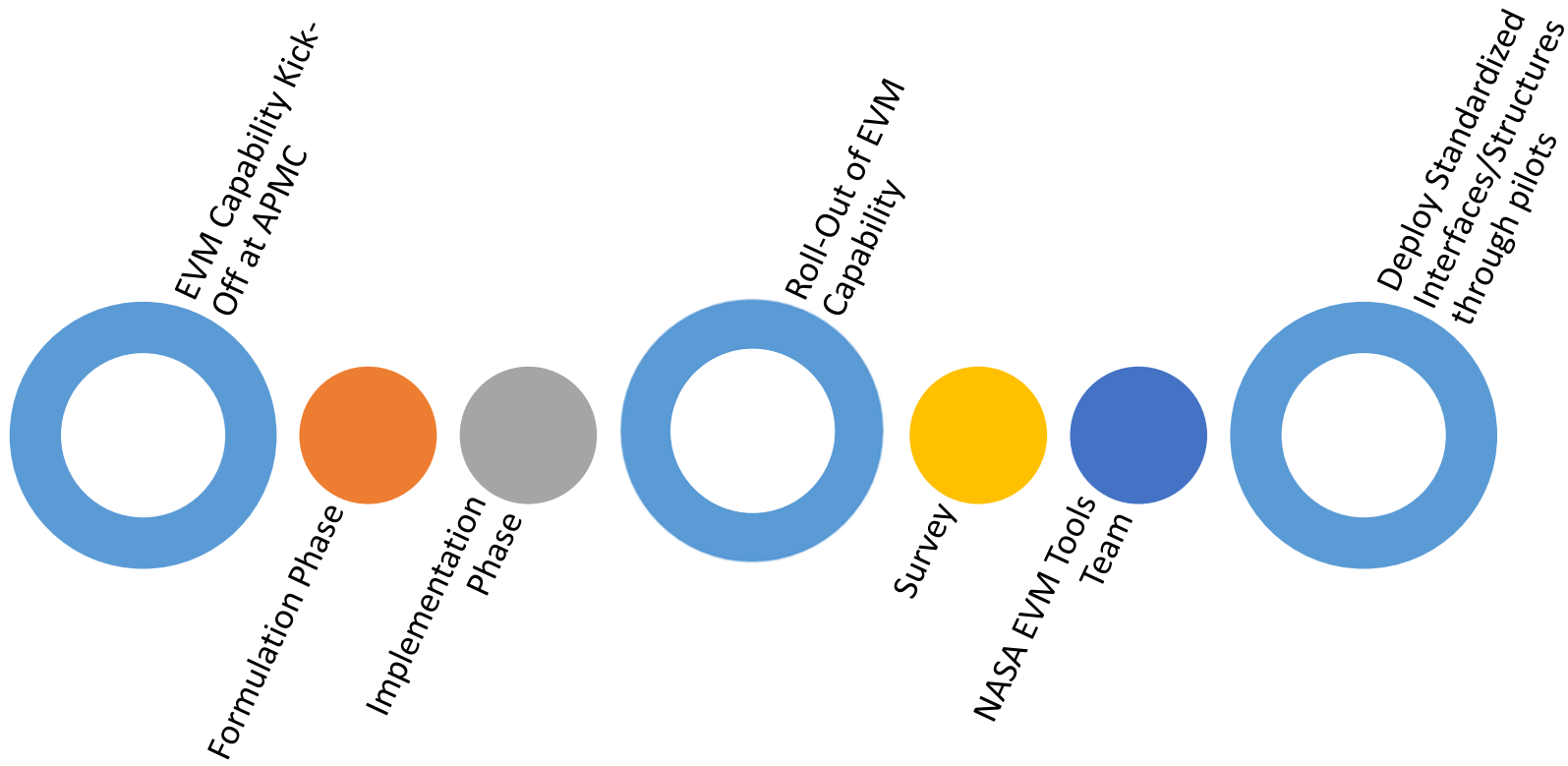


Purpose and Agenda

- Purpose
 - Highlight the inconsistencies in planning approaches identified in the Project Management Capability Survey
 - Describe inroads that have been made to address some inconsistencies
- Agenda
 - Background
 - Survey Approach & Summary Results
 - Progress To Date
 - Summary and Forward Work



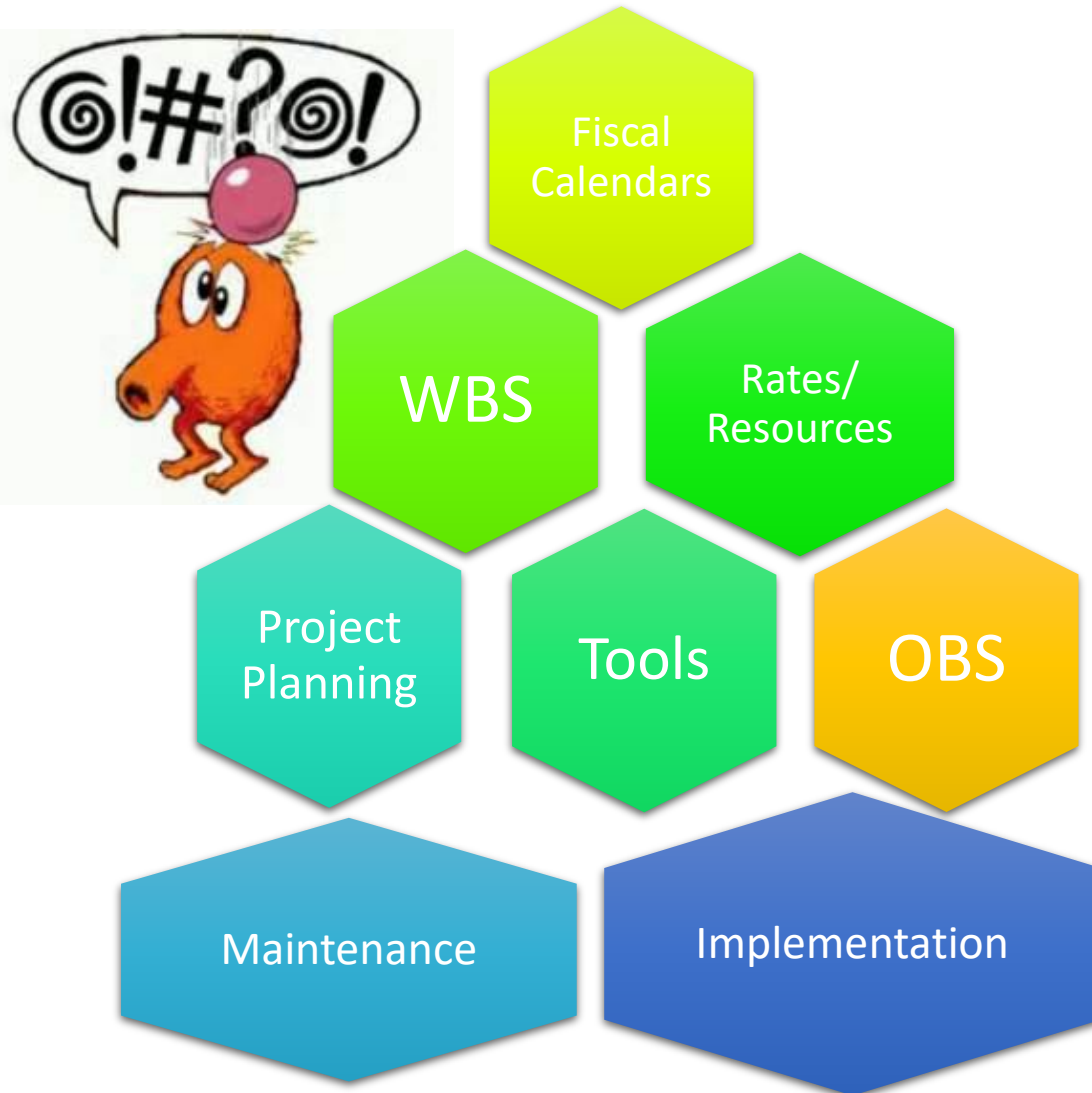
Background



Timeline: December 2009 through Present



Survey Approach



Purpose

Ascertain the feasibility of implementing a common system, including software, procedures, and training throughout the Agency

Approach

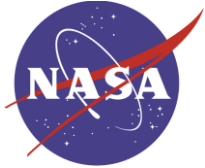
- 8 Survey Categories
- 52 Questions for Centers
- 60 Questions for Projects

Center Responses

LaRC, GRC, GSFC, KSC, JSC, MSFC, and DFRC

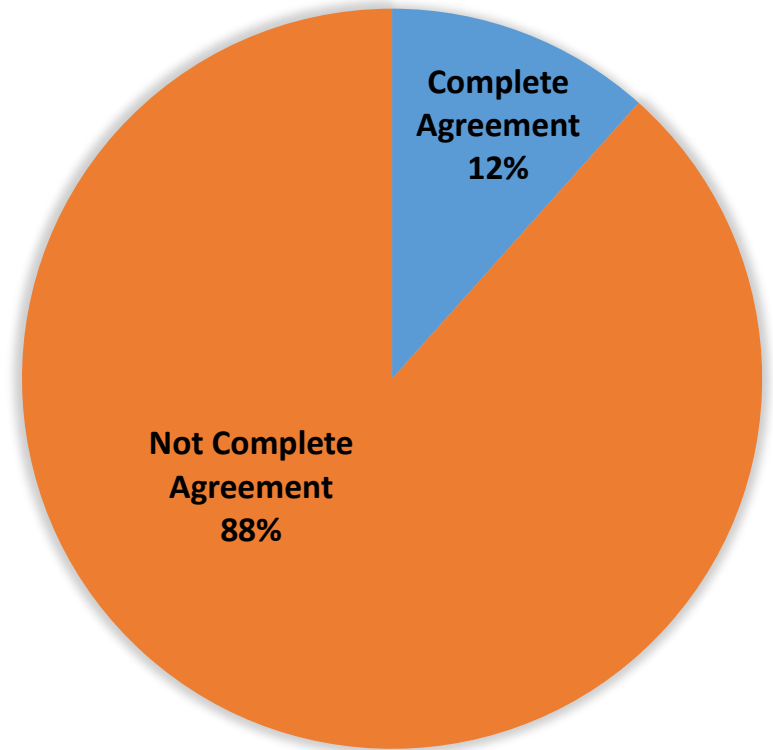
Project Responses

Kepler, Iris, Sofia (ARC, DFRC), CoNNect, GSFC (Multi-projects), MPCV, and Ares

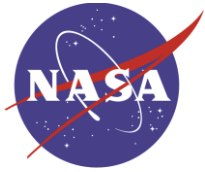


Summary Survey Results and Actions

- Complete Agreement in a Handful of Areas
- Vast Majority of Areas Have Inconsistencies

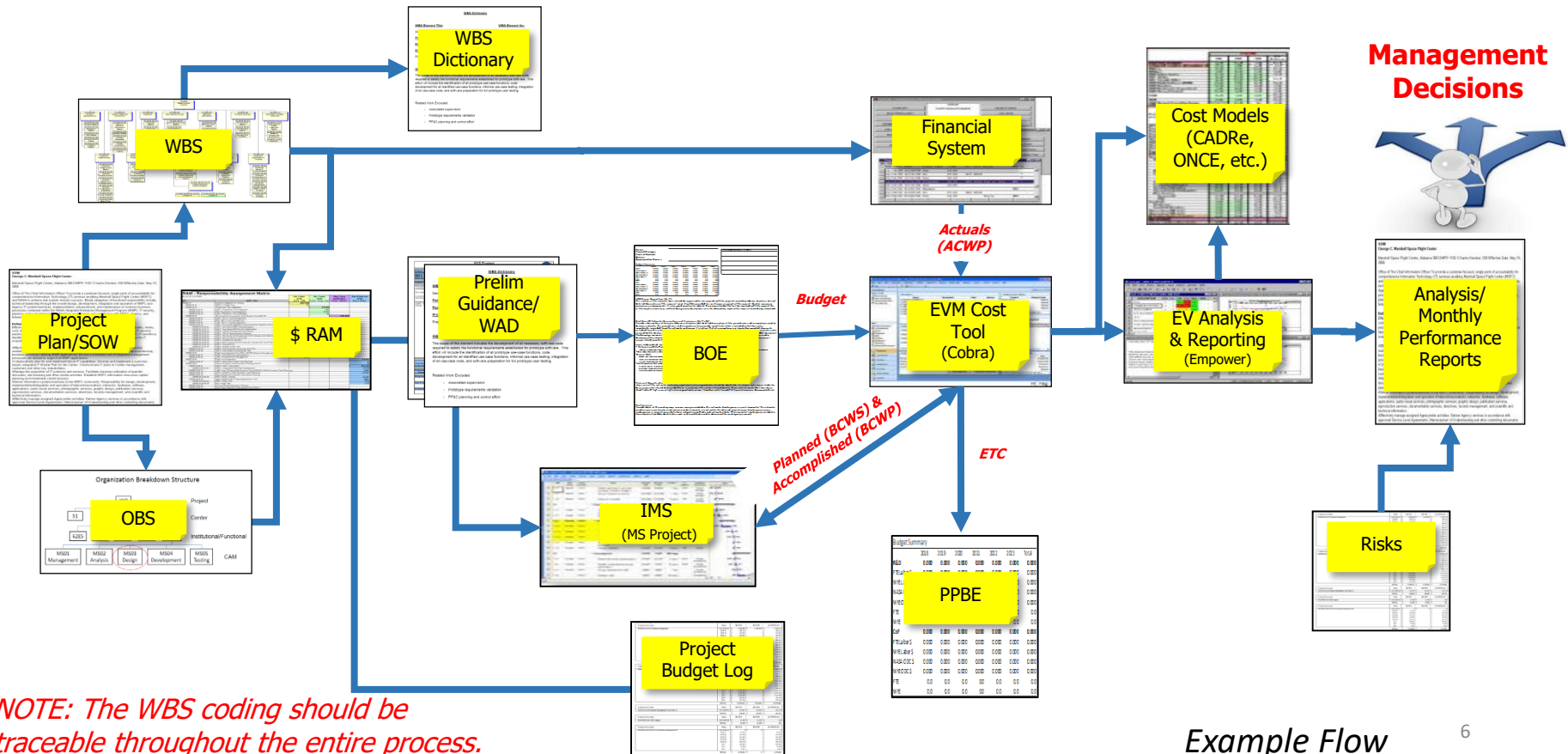


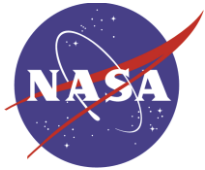
- Began utilizing NASA EVM Tools Team (chartered by NASA EVM Program Executive) to identify opportunities for standardization
- GSFC is testing the EVM Tools Team recommendations on pilot projects



Common PP&C Processes for PPBE

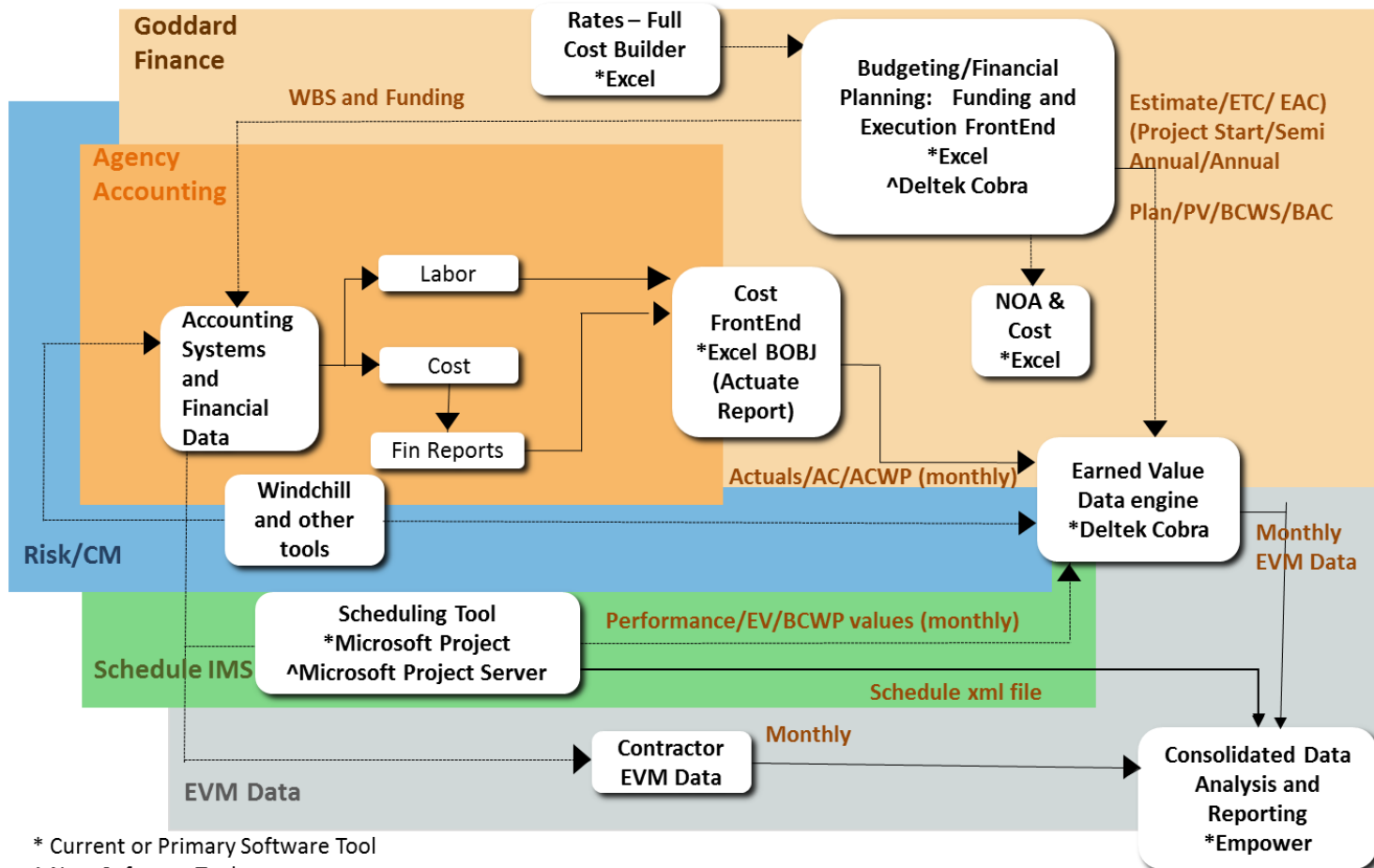
- Issue: NPR 7120.5 (EVM, JCL, etc.) products and OCFO reporting come from different systems
- Impacts: Project Managers may be looking at distinct and possibly disjointed views of project management data.
- Recommended Approach: Integrate PPBE process with PP&C processes and standard structures and tools.





Common COTS Architecture

- Issue: Some COTS variation between Centers
- Impacts: Centers must purchase or create interfaces to facilitate data flow.
- Recommended Approach: Standardize COTS and interfaces for use at all Centers.





Align Cost and Schedule

- Issue: Many times Cost plans are created by Financial personnel and Schedules by Planner/Schedulers with limited coordination.
- Impacts: Start and Finish dates of Control Accounts do not match and actual cost does not align with work accomplished creating artificial variances that can be difficult to reconcile.
- Recommended Approach: Use simultaneous meeting with P-CAM, EVM Lead, Scheduler, and Financial personnel. Verify dates match in Empower by importing cost xml and schedule xml files.

WBS	DESCRIPTION	PCT CMP	IMS BL START	FIRST BCWS	IMS BL FINISH	LAST BCWS	IMS START	FIRST ACWP/ETC	IMS FINISH	LAST ACWP/ETC
1.1.1.1	PROJECT OFFICE MANAGEMENT	69.47	2015-01-15	2014-04-01 2014-04-30	2015-02-25	2018-09-01 2018-09-30	2013-02-13	2014-04-01 2014-04-30	2015-03-13	2018-09-01 2018-09-30
1.1.1.2	PROJECT SCIENTIST-APL	67.71		2014-04-01 2014-04-30		2018-09-01 2018-09-30	2012-01-12	2014-04-01 2014-04-30	2014-02-26	2018-09-01 2018-09-30
1.1.1.5	PROJECT ADMINISTRATION	73.90		2014-04-01 2014-04-30		2018-09-01 2018-09-30		2014-04-01 2014-04-30		2018-09-01 2018-09-30
1.1.1.6	PROJECT SCHEDULING/EVMS	76.16		2014-04-01 2014-04-30		2018-09-01 2018-09-30		2014-04-01 2014-04-30		2018-09-01 2018-09-30
1.1.1.7	COST ESTIMATING/JCL SUPPORT	0.00		2014-04-01 2014-04-30		2014-04-01 2014-04-30	2012-07-02	2014-04-01 2014-04-30	2013-06-21	2014-05-01 2014-05-31
1.1.1.8	PP&E	100.00		2014-05-01 2014-05-31		2016-10-01 2016-10-31		2014-06-01 2014-06-30		2017-09-01 2017-09-30
1.1.1.9	PROJECT COMMUNICATIONS	93.71		2016-01-01 2016-01-31		2017-06-01 2017-06-30		2016-01-01 2016-01-31		2018-09-01 2018-09-30
1.1.1.A	RENAMING OF SPP	66.48		2017-04-01 2017-04-30		2017-06-01 2017-06-30		2017-04-01 2017-04-30		2017-05-01 2017-05-31
1.1.2.1	MISSION SYSTEM ENGINEERING (LEAD, DEPUTY, SOFTWARE)	74.50		2014-04-01 2014-04-30		2018-09-01 2018-09-30	2012-01-03	2014-04-01 2014-04-30	2013-10-03	2018-09-01 2018-09-30
1.1.2.2	SPACECRAFT SYSTEM ENGINEERING (LEAD, DEPUTY ELECTRICAL)	65.16	2014-12-10	2014-04-01 2014-04-30	2014-12-11	2018-09-01 2018-09-30	2012-04-04	2014-04-01 2014-04-30	2015-03-11	2018-09-01 2018-09-30
1.1.2.3	PAYLOAD SYSTEMS ENGINEERING	68.15		2014-04-01 2014-04-30		2018-09-01 2018-09-30	2012-04-02	2014-04-01 2014-04-30	2013-05-23	2018-09-01 2018-09-30

Items highlighted in pink indicate disconnects



Organizational Breakdown Structure

- Issue: Lack of common OBS employed by projects, even when those projects were in the same Center and program
- Impact: Impedes ability to aggregate multiple projects within and across Centers and accurate reporting by organization
- Recommended Approach: Use the Center OBS in cost and schedule tools

Code	Description
1	Agency
10	Headquarters
21	Ames Research Center
22	Glenn Research Center
23	Langley Research Center
24	Armstrong Flight Research Center
51	Goddard Space Flight Center
55	Jet Propulsion Laboratory
62	Marshall Space Flight Center
64	Stennis Space Center
72	Johnson Space Center
76	Kennedy Space Center
AA	Center Director Staff
NE	Engineering Directorate
NE-E	Electrical Division
NE-EA	Avionics Branch
NE-ES	Software Branch
NE-EG	Ground Controls Branch
SA	Safety & Mission Assurance



Resource Breakdown Structure

- Issue: Resource breakdown structures varied between projects, even projects within the same Center
- Impacts: Sub-optimizes the ability of the projects and Centers to utilize the information for decision making
- Recommended Approach: Standardize resource types and naming conventions that are consistent with SAP data

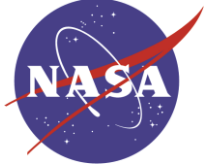
	A	B	C	D	E	F	G	H	I	J	
1	Top Level										
2	Level 1	Level 2 DESCRIPTION		LABOR Level 3	DESCRIPTION		Level 4	DESCRIPTION		Level 5	Resource Description
3	All			(Y/N)							
4		T	Travel	N	T	Travel	TCIV	Travel-Civil Servant	TRVCS	Travel	
5									2000	Trv Budget	
6									2100	Tvl & Transprt Persn	
7									9000.2500	TRAVEL	
8		L	Civil Servant Labor	Y	L	Civil Servant Labor	L	Civil Servant Labor	CS-AD10	Admin.Entry-CS	
9									CS-AD20	Admin. JR-CS	
65									CGS	CSRS RETIREMENT - GO	
66		P	Procurements	N	M	Material	EQP	Equipment	EQPT	Equipment	
67									2570	O&M of Equipment	
68									3100	Equipment	
69							MAT	Material	MATL	Material	
70									2600	Supplies & Materials	
71									9000.5233	STRUCTURE & MAT	
72				O		Other Direct Costs	FAC	Facilities	FACL	Facilities	
73									2540	O&M of Fac	
74									9000.3000	FACILITIES SERVICES	
78							ITS	IT Service & Equip	ITSE	IT Services and Equipment	
79									9000.4000	INFORMATION SERVICES	
84									9500.9104	Info. Tech (IT)	
85							ODC	Miscellaneous	MISC	Miscellaneous Expenses	
86									HSTACT	Historic Actuals	
131									300	Penalty & Fines Rev	
132							TAX	Taxes	TAXES	Center and Code Charges	
133									9000.1000	Corp G&A	
150							TRN	Training	TRAIN	Training	
151											
152							ITRA	Other Centers	ITRAC	Other Centers	
153											
154				S		Subcontractor	FAB	Fabrication Pool	FABP	Fab Pool	
155									9000.6000	FABR SVCS INHOUSE	
156									9000.6100	FABR SVCS CONTRACTED	
157							KTR	Contracts	CONTR	Contracts	



Summary and Forward Work

- Standardization provides benefits in common key areas
 - Data that is standardized is better understood to be consistent and valid; and therefore, is more meaningful and valuable to all levels of management
 - Reduces learning curves for people moving from project to project
 - NASA projects are more often comprised of multiple Centers, driving the need for better integration of data
 - Less reinventing the wheel on COTS and interfaces, which saves money
 - Creates PP&C Capability
- Look at ways to use these tools to support NPR 7120.5 (EVM, JCL, etc.) and OCFO reporting to meet business needs – reporting coming from one system
- NASA will continue to deploy to projects the standardization of interfaces and structures based on recommendations from the NASA EVM Tools Team
 - An Interface and Structure Handbook could be an outcome of this work

Continuing the efforts to standardize the common critical elements of planning and control provide consistency for PP&C (including EVM)



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