

U.S. CMS Detector Operations Change Control Activity						
		Change Request Number	Description of Change	CY16Q3 Plan	Change \$	CY16Q4 Plan
WBS	Subsystem					
11	Endcap Muon	CR-026, CR-027	UCLA M&S for comparator ASIC encapsulation, Texas A&M M&S for CTP7 boards for GE1/1 backend	\$1,889,353	\$84,355	\$1,973,709
12	Hardon Calorimeter	SOW, CR-037, CR-038	Brown SOW: labor for HE/HF burn-in, testing, and ops; Various: re-align COLA & travel with highest priorities; Maryland: extend support for electronics labor	\$1,839,715	\$51,694	\$1,891,408
13	Trigger		Adjustment	\$825,091	\$1,126	\$826,216
14	Data Acquisition			\$985,340	\$0	\$985,340
15	Electromagnetic Calorimeter	CR-014, CR-015	CERN TA COLA reductions due to updated plans for grad students at Princeton, Florida State, and Virginia	\$913,303	(\$30,390)	\$882,913
16/17	Tracker (Fpix & SiTrk)			\$854,097	\$0	\$854,097
18	Detector Support			\$119,165	\$0	\$119,165
19	BRIL			\$343,754	\$0	\$343,754
30	Phase 2 Upgrade R&D	SOWs, CR-047	NSF Suppliment SOWs; CR-047: Iowa rad hard scint.	\$3,666,341	\$999,455	\$4,665,796
11-19,30 Detector Operations				\$11,436,160	\$1,106,240	\$12,542,400
U.S. CMS Common Operations Change Control Activity						
		Change Request Number	Description of Change	CY16Q3 Plan	Change \$	CY16Q4 Plan
WBS	Subsystem					
21.2	Common Costs (M&OA)	94,95,97	M&O-A adjustments for actual exchange rate	\$4,332,942	(\$307,105)	\$4,025,837
21.3	RCMS			\$543,397	\$0	\$543,397
21.4	LHC Physics Center	SOW	UIC: leadership and technical support labor	\$860,327	\$212,610	\$1,072,937
21.5	Operations Support	96,98,99	Rice: support for US CMS L1 Det Ops manager; MIT cost adjust; CERN TA COLA for key computing ops	\$1,526,989	\$557,322	\$2,084,311
21.6	Program Office			\$1,205,115	\$0	\$1,205,115
21.7	E&O			\$283,809	\$0	\$283,809
21	Common Operations			\$8,752,580	\$462,828	\$9,215,407
U.S. CMS Software and Computing Change Control Activity						
		Change Request Number	Description of Change	CY16Q3 Plan	Change \$	CY16Q4 Plan
WBS	Subsystem					
22.1	Fermilab Facilities		Adjustments prior to SOW	\$5,923,423	\$10,000	\$5,933,423
22.2	University Facilities			\$3,952,858	\$0	\$3,952,858
22.3	Computing Operations			\$865,105	\$0	\$865,105
22.4	Computing Infra and Services			\$2,439,484	\$0	\$2,439,484
22.5	Software and Support	CR-014	CERN TA labor support for new processor architectures	\$1,516,139	\$32,018	\$1,548,158
22.6	Technologies & Upgrade R&D	CR-013, CR-014	Increased UCSD event formats labor support; Processor SDT&Env R&D moved from Princeton to Nebraska	\$866,536	(\$11,061)	\$855,475
22.7	S&C Program Management & CMS Coordination	CR-013	Increased UCSD offline reconstruction coordination labor support	\$605,887	\$9,519	\$615,406
22	Software and Computing			\$16,169,433	\$40,476	\$16,209,910
U.S. CMS Operations Program Total				\$36,358,173	\$1,609,544	\$37,967,717