

SuperCDMS at SNOLAB Project Office BASIS of ESTIMATE FORM (BoE)		Document Number:	
		Date of Estimate: 16-Oct-15	
		Prepared by: Anders W. Borgland	
UID Number:	WBS Section: 1.7.6		
Task Name: eManufacturing software			
Cost Type: __ M&S <input checked="" type="checkbox"/> Labor	Costing Method: __ Engineering Estimate	<input checked="" type="checkbox"/> Prior purchase or experience Source: Current experience with eTraveler in LSST and long experience with multiple versions of SuperCDMS.	<input type="checkbox"/> Catalog Price Source: _____
	<input type="checkbox"/> Vendor Quote (attached)	<input type="checkbox"/> Other- Description: _____	
Attach Relevant Documents (including but not limited to): RFP, Responses to RFP, Technical Evaluation of RFP, Vendor Quotes, Technical Specifications, drawing numbers			
Task Duration: (calendar weeks, 85% achievable): weeks (this applies only for BoE's written at lowest task level)			
Task M&S Cost (FY14\$): \$0 See cost table below Task M&S Contingency (%): %		Task Labor (resource type & work hours or % for duration of task, 85% efficiency assumed): 1680 hours See labor table below Task Labor Contingency (%): 50%	

Change Log

Date	Description
02.23.2015	Initial version – numbers are very preliminary
05.06.2015	Updated numbers. More effort on project.
08.11.2015	Removed 240h of SLAC technician on-project work.
08.31.2015	WBS item 1.8.5 has been transferred to WBS 1.7
10.16.2015	Accepted to WBS 1.7 as 1.7.6 – Will re-code into 1.7.3.1 – Procedures after CD-1

Details of Estimate: A summary of the costs at level 4 is included in the table below. Tasks are separated by M&S and labor. Labor is estimated in hours.

This BoE contains labour for the eTraveler system and the corresponding data portal. The eTraveler itself has been developed by LSST and SuperCDMS is reusing it. However, all the SuperCDMS specific (tracking and installation) procedures need to be identified, translated to YAML and entered into the eTraveler system. A SuperCDMS specific data portal to display the information in the eTraveler needs to be developed.

W.B.S	Item	Cost(\$K)	Contingency	
			Fraction	Cost(\$K)
	Total	\$ -	#DIV/0!	\$ -

W.B.S	Item	Labor type		
		Software developer National lab on project	Faculty off- project	Collaboration support off- project
1.8.5	eManufacturing software			
1.8.5.1	eTraveler			
1.8.5.1.2	Gather requirements for eTraveler use in SuperCDMS SNOLAB	60		
1.8.5.1.3	Procedures			
1.8.5.1.3.1	Identify and collect procedures to be implemented in eTraveler	320		
1.8.5.1.3.2	Translate procedures to Yaml	160		
1.8.5.1.3.3	Test and validate procedures in eTraveler	120		
1.8.5.1.3.4	Solicit feedback	40		
1.8.5.1.3.5	Define eTraveler release schedule	40		
1.8.5.1.3.6	Documentation	60		
1.8.5.2	Data portal			
1.8.5.2.1	Gather technical requirements	40	40	40
1.8.5.2.2	Define reports and standard queries to be displayed	40	40	40
1.8.5.2.3	Design prototype	40	40	80
1.8.5.2.4	Write code for data portal prototype			120
1.8.5.2.5	Solicit user feedback	40	40	40
1.8.5.2.6	Write code for data portal			160
1.8.5.2.7	Documentation	40		40
	Total	1000	160	520