

PBP Example for a Research and Development Program

Overview:

The government is developing, under a program being performed by a large defense contractor, a new class of small, stealthy amphibious craft to use in coastal deployments of Special Forces in high-tension areas. A small company has successfully completed a related set of Small Business Innovation Research (SBIR) program efforts (both Phases I and II) to develop the hardware and software for a hand-held piece of specialized test equipment that can be used to measure the radar signature properties of the material used to form the hull and superstructure of these small craft. To date, this small firm has demonstrated the utility of such a device in laboratory settings using hardware and software developed for concept demonstration purposes only. Now, the government wishes to have this firm develop a pre-production prototype of this hand-held device and demonstrate its practical utility in field conditions on a government-furnished full-scale version of the amphibious craft. A sole source, fixed-price contract based upon the proprietary information developed under Phases I and II has been negotiated for the development and demonstration of the pre-production prototype.

The prices agreed to for the work to take place under the contract are as follows:

CLIN	Description	Price
0001	Pre-production prototype software	\$2,500,000
0002	Pre-production prototype hardware	\$4,000,000
0003	Field testing using GFE	\$2,000,000
0004	Final production hardware and software designs and recurring price estimate	\$1,500,000

Performance Events:

The parties agreed upon a series of performance events that will form the basis for the contract financing to be provided under this contract. The testing will be performed at a government installation using a government-furnished test watercraft and will involve the efforts of government personnel, the watercraft prime contractor, and personnel from the small business developer of the test device. Final payments under CLINs 0001 and 0002 will take place upon the start of the field testing activities. At that time, all previously made performance-based payments for those CLINs will be liquidated. The contractor will receive final payment for the activities under CLIN 0003 upon submission of the field testing report. At that time, all previously made performance-based payments for that CLIN will be fully liquidated. Final payment for CLIN 0004 will be made upon final acceptance of the production design documentation and production price estimates. At that time, all previously made performance-based payments will be

fully liquidated. The PBP event definitions, accomplishment metrics, and values are set forth as attachments to the contract as shown on the following pages.

Performance-Based Payments

CLIN	Event no.	Event type (severable (S) or cumulative (C))	Description	Accomplishment expected	Method of verification	Event value
0001	1	S	Submission of software development plan.	Submit plan and schedule for development of all software for pre-production prototype.	Receipt of software development plan by the Program Manager.	\$500,000
0001	2	C	Completion of 25% of estimated code.	Complete development of 25% of the amount of code estimated to be required as set forth in the software development plan. Completion of this event is conditioned upon the completion of event #1.	Certification by the contractor as to percentage of estimated code completed.	\$500,000
0001	3	C	Completion of 50% of estimated code.	Complete development of 50% of the amount of code estimated to be required as set forth in the software development plan.	Certification by the contractor as to percentage of estimated code completed.	\$750,000

CLIN	Event no.	Event type (severable (S) or cumulative (C))	Description	Accomplishment expected	Method of verification	Event value
				Completion of this event is conditioned upon the completion of events 1 and 2.		
0001	4	C	Completion of 75% of estimated code.	Complete development of 75% of the amount of code estimated to be required as set forth in the software development plan. Completion of this event is conditioned upon the completion of events 1,2, and 3.	Certification by the contractor as to percentage of estimated code completed.	\$500,000
0002	5	S	Order long-lead items.	Place orders for all long-lead hardware items.	Certification by contractor.	\$500,000
0002	6	S	Completion of chassis machining.	Pre-production prototype chassis machining completed and accepted by contractor.	Sign-off by contractor and verification of receipt of completed chassis machining by DCMA representative.	\$1,000,000
0002	7	C	Completion of electrical	All electrical assemblies	Sign-off by contractor's	\$1,500,000

CLIN	Event no.	Event type (severable (S) or cumulative (C))	Description	Accomplishment expected	Method of verification	Event value
			assembly.	have been completed and tested as required at the subassembly level. Completion of this event is conditioned upon the completion of event #5.	production supervisor and verified by DCMA representative .	
0002	8	C	Completion of prototype device assembly.	All electrical and mechanical components have been assembled into the chassis and the prototype device is ready for testing at the system level. Completion of this event is conditioned upon the completion of events 5, 6, and 7.	Sign-off by contractor's production supervisor and verified by DCMA representative .	\$600,000
0003	9	S	Completion of field testing plan and schedule.	Submit plan for all field testing and the schedule for the conduct of all field tests, including the required participation of	Receipt of field testing plan by the Program Manager.	\$200,000

CLIN	Event no.	Event type (severable (S) or cumulative (C))	Description	Accomplishment expected	Method of verification	Event value
				government and watercraft prime contractor personnel.		
0003	10	C	On-site test walk-thru orientation.	Complete a walk-thru at the test site with all test participants and all government- and contractor-provided equipment in place. Completion of this event is conditioned upon the completion of event #9.	Verification by the government's designated test director.	\$500,000
0003	11	C	Completion of 50% of all planned tests.	Completion of at least 50% of the planned testing as set forth in the test plan. Completion of this event is conditioned upon the completion of event #10.	Verification by the government's designated test director.	\$550,000
0003	12	C	Completion of all planned tests.	Completion of all of the planned testing as set forth in the test plan.	Verification by the government's designated test director.	\$550,000

CLIN	Event no.	Event type (severable (S) or cumulative (C))	Description	Accomplishment expected	Method of verification	Event value
				Completion of this event is conditioned upon the completion of event #11.		
0004	13	S	Completion of 50% of production software.	Completion of at least 50% of the planned production software.	Certification by contractor.	\$150,000
0004	14	S	Completion of 25% of production hardware design	Completion of at least 25% of the designs for the production version of the testing device.	Certification by contractor.	\$350,000
0004	15	C	Completion of all production software.	Completion and testing of all software code for the production version of the device. Completion of this event is conditioned upon the completion of event #14.	Software test witnessed by DCMA representative	\$150,000
0004	16	C	Completion of 50% of production hardware design.	Completion of at least 50% of the designs for the production version of the testing device. Completion of this event is conditioned	Certification by contractor.	\$350,000

CLIN	Event no.	Event type (severable (S) or cumulative (C))	Description	Accomplishment expected	Method of verification	Event value
				upon the completion of event #14		
0004	17	C	Completion of all production hardware design.	Completion of all of the designs for the production version of the testing device. Completion of this event is conditioned upon the completion of event #16.	Certification by contractor and concurrence by DCMA representative .	\$350,000