

BUDGET ITEM JUSTIFICATION SHEET

APPROPRIATION/BUDGET ACTIVITY						P-1 ITEM NOMENCLATURE		DATE	
OP N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						3107 SUBMARINE BROADCAST SUPPORT		February 2011	

QUANTITY	PY	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCC	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost to Complete	Total
COST (in millions)		0.105		10.357		10.357	7.689	10.613	19.205	24.101	Cont.	Cont.
SPARES COST (in millions)		0.224		0.114		0.114	1.182	2.699	3.192	0.255	Cont.	Cont.

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:

PROGRAM COVERAGE: The Submarine Broadcast Support program was established to improve the reliability, availability, maintainability, efficiency and performance of the Very Low Frequency (VLF) and Low Frequency (LF) submarine broadcast systems. These transmission mediums, VLF/LF, comprise the primary line of Fleet Ballistic Missile Nuclear Command, Control and Communications (NC3). Shore based transmitter sites are emergency action message relay points providing primary connectivity between the senior leadership and Ship Submersible Ballistic Nuclear Submarines (SSBN). Upgrades to shore infrastructure include integrating internet protocol capability in broadcast control authorities.

Submarine Broadcast Upgrades (W4008): Composite bushings will replace the expensive and highly unique and aging ceramic bushings that are deteriorating at VLF/LF sites and threaten reliability of the submarine broadcast. LaMoure modernization (commencing in FY12) replaces the obsolete equipment at Naval Computer & Telecommunications Area Master Station Atlantic (NCTAMS LANT) detachment, LaMoure, North Dakota. This extends the expected system life to 2025.

Low Band Universal Communication System (LBUCS) (W4009): LBUCS Transmit will modernize the Transmit Subsystem hardware, software and waveform components at Broadcast Keying Site (BKS) and Broadcast Transmit Site (BTS), including the Very Low Frequency Broadcast Builder, AN/URT-30B Integrated VLF Transmit Terminal (VTT), VTT Proxy, the MD-1310 Modulator, and the NATO Interoperable Submarine Broadcast System (NISBS). LBUCS Receive will modernize receive subsystem hardware, software and waveforms at the Broadcast Control Authority, BKS and onboard Ohio SSBN/Ship Submersible Guided Nuclear Submarine, Seawolf, Los Angeles and Virginia class submarines.

Nuclear Command, Control and Communications Long Term Solution (NC3 LTS) (W4010): NC3 LTS will provide accurate and reliable delivery of time-critical messages for command and control of nuclear forces in a pre-attack environment for Force Direction, Force Management, Situation Monitoring and Planning by replacing functionality provided by the existing Nuclear Command, Control and Communications Hybrid Solution which will begin to experience supportability issues in FY14. NC3 LTS will procure and field the Nova Information exchange Terminal (NXT) to replace End of Life legacy user terminals at shore communications stations.

COST ANALYSIS

DATE

February 2011

APPROPRIATION ACTIVITY
OP. N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE
3107 SUBMARINE BROADCAST SUPPORT

COST CODE	ELEMENT OF COST	ID CODE	FY 2010		FY 2011		FY 2012		
			QTY	UNIT COST	QTY	UNIT COST	QTY	UNIT COST	
			TOTAL COST	TOTAL COST	TOTAL COST	TOTAL COST			
W4008	SUBMARINE BROADCAST SYSTEMS Bushings LaMoure Modernization	A					1	8,537	8,537
W4009	LOW BAND UNIVERSAL COMMUNICATION SYSTEM (LBUCS) Transmit Broadcast Keying Site Broadcast Transmit Site Receive Site Survey Nonrecurring	B					1	8,537	8,537
W4010	NUCLEAR COMMAND, CONTROL COMMUNICATIONS LONG TERM SOLUTION (NC3 LTS) Equipment Nova Information exchange Terminal (NIXT)	B					50	9,840	492
W4555	PRODUCTION SUPPORT LaMoure Modernization						50	9,840	492
W4777	INSTALLATION Afloat Install								350
W4776	Ashore Install Bushings NIXT								150
	TOTAL								200
	SPARES								10,357
									114

Remarks:

DD FORM 2446, JUN 86

PROCUREMENT HISTORY AND PLANNING

A. DATE

February 2011

B. APPROPRIATION/BUDGET ACTIVITY

OP.N - BAZ COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE

3107 SUBMARINE BROADCAST SUPPORT

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST Delivery	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
W4008	Submarine Broadcast Upgrades											
	Bushings	09	Austin Insulators, Canada	SS/FFP	SSC SD	Jan-09	Mar-09	Sep-09	1	1,383	YES	N/A
	LaMoure Modernization	12	Unknown	C/FFP	SSC SD	May-12	May-12	May-13	1	8,537	NO	
W4010	Nova Information exchange Terminal (NIXT)	12	UNISYS Corp, Reston, VA	C/FFP	SSC SD	Nov-07	Jan-12	Apr-12	50	9,840	NO	N/A

D. REMARKS

MODIFICATION TITLE:
 COST CODE:
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:
 FINANCIAL PLAN: (\$ in millions)

Submarine Broadcast Upgrade
 WA008
 BUSHINGS/INSULATORS
 Replaces VLFLF Bushings/Insulators that have reached the end of their service life.

February 2011

RDT&E PROCUREMENT: Kit Quantity Installation Kits Installation Kits Nonrecurring Equipment Bushings Insulators Equipment Nonrecurring Engineering Change Orders Data Training Equipment Support Equipment Production Support Shore Pre-Design Installation Design Installation of Hardware: PRIOR YR EQUIP (Note 1) FY 10 EQUIP FY 11 EQUIP FY 12 EQUIP FY 13 EQUIP FY 14 EQUIP FY 15 EQUIP FY 16 EQUIP TC EQUIP	Prior Yrs	FY10	FY11	FY12	FY13	FY14	FY15	FY16	TC	TOTAL
	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY
6	10,511									6
5	7,247									5
1	3,264									1
0.840										0.840
4	0.133	1	0.105							6
4	0.133	1	0.105	1	0.150					6
				0.150						0.388
				0.150						11,739

CONTRACT DATES: FY 2010:
 DELIVERY DATES: FY 2010:

ADMINISTRATIVE LEADTIME: 6 Months
 FY 2011:
 FY 2011:

PRODUCTION LEADTIME: 6 Months
 FY 2012:
 FY 2012:

INSTALLATION SCHEDULE:	FY 11				FY 12				FY 13				FY 14			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT																
OUTPUT																
TC																
TOTAL																

Notes/Comments
 1) Due to operational restriction, Bushing installation for VLFLF Cutler-Maine will occur in FY12

MODIFICATION TITLE:
 COST CODE:
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION:
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:
 FINANCIAL PLAN: (\$ in millions)

LaMoure Modernization
 W/4008
 VLF Transmitter
 Replaces the obsolete equipment at NCTAMS LANT detachment, LaMoure. Extends expected system life to 2025.

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RD/TE	Prior Yrs.		FY10		FY11		FY12		FY13		FY14		FY15		FY16		TC	TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$			QTY
PROCUREMENT:																			
Kit Quantity																			
Installation Kits																			
Installation Kits Nonrecurring																			
Equipment																			
Equipment Nonrecurring																			
Engineering Change Orders																			
Data																			
Training Equipment																			
Support Equipment																			
Production Support (Note 1)																			
Shore Pre-Design Installation Design																			
Installation of Hardware:																			
PRIOR YR EQUIP																			
FY 10 EQUIP																			
FY 11 EQUIP																			
FY 12 EQUIP																			
FY 13 EQUIP																			
FY 14 EQUIP																			
FY 15 EQUIP																			
FY 16 EQUIP																			
TC EQUIP																			
TOTAL INSTALLATION COST																			
TOTAL PROCUREMENT COST																			
METHOD OF IMPLEMENTATION:																			

Alteration Installation Team
 CONTRACT DATES: (Note 2) FY 2010: FY 2011: FY 2012: May-12
 DELIVERY DATES: FY 2010: FY 2011: FY 2012: May-13
 ADMINISTRATIVE LEADTIME: 3 Months
 PRODUCTION LEADTIME: 12 Months

INSTALLATION SCHEDULE:	FY 11				FY 12				FY 13				TOTAL	
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT														
OUTPUT														

INSTALLATION SCHEDULE:	FY 15				FY 16				TOTAL
	1	2	3	4	1	2	3	4	
INPUT									
OUTPUT									

Notes/Comments
 1) Increased production support due to the first and only year procuring a unique system, requiring increased contractor and government personnel support and specialized government furnished equipment and information
 2) Contract and delivery dates will be identified once contract vehicle and contract award is determined

MODIFICATION TITLE:
 COST CODE:
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION:
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:
 FINANCIAL PLAN: (\$ in millions)

Nuclear Command, Control Communications System Long Term Solution (NC3 LTS)
 W4010
 Nuclear Command, Control and Communications Hybrid Solution (NC3 HS)
 Installation of NC3 LTS components

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RT&E PROCUREMENT:	Prior Yrs		FY10		FY11		FY12		FY13		FY14		FY15		FY16		TC	TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$			
Kit Quantity					50	0.492											CONT	70	12.888
Installation Kits																			
Installation Kits Nonrecurring Equipment																			
Nova Information Exchange Terminal (Note 1)								50	0.492										
Engineering Change Orders																			
Data																			
Training Equipment																			
Support Equipment																			
Production Support																			
Other (DSA)																			
Installation of Hardware:																			
PRIOR YR EQUIP																			
FY 10 EQUIP																			
FY 11 EQUIP																			
FY 12 EQUIP																			
FY 13 EQUIP																			
FY 14 EQUIP																			
FY 15 EQUIP																			
FY 16 EQUIP																			
TC EQUIP																			
TOTAL INSTALLATION COST								0.200											
TOTAL PROCUREMENT COST								0.692											
METHOD OF IMPLEMENTATION:																			

Alteration Installation Team
 ADMINISTRATIVE LEADTIME: 3 Months
 PRODUCTION LEADTIME: 3 Months

CONTRACT DATES: FY 2010: FY 2011: FY 2012: Jan-12
 DELIVERY DATES: FY 2010: FY 2011: FY 2012: Apr-12

INSTALLATION SCHEDULE:

PY	FY 11				FY 12				FY 13				FY 14						
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
INPUT																			
OUTPUT																			

INSTALLATION SCHEDULE:

PY	FY 15				FY 16				TC	TOTAL	
	1	2	3	4	1	2	3	4			
INPUT											
OUTPUT											

Note 1) NC3 LTS will procure and field the Nova Information Exchange Terminal (NIXT) to replace End of Life legacy user terminals at shore communications stations
 NIXT is not associated with the NC3 LTS development contract which is scheduled to be awarded in FY12

APPROPRIATION/BUDGET ACTIVITY

OP N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

(DOD EXHIBIT P-21)

DATE
February 2011

PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
3107 SUBMARINE BROADCAST SUPPORT

COST CODE	ITEM/MANUFACTURER	S E R V	PROQ QTY	ACCEP T P R I O R TO	BAL DUE AS OF	CY 10												CY 11	CY 12	FISCAL YEAR 13								
						CALENDAR YEAR 10						CALENDAR YEAR 11								CALENDAR YEAR 12						CALENDAR YEAR 13		
						O	C	D	O	J	F	O	C	D	O	J	F			O	C	D	J	F	M			
W4008	Submarine Broadcast Upgrades: Bushings		2	1	1																							
W4010	Nova Information Exchange Terminal (NIXT)		50		50																							

ITEM	Manufacturers Name and Location	MSR	PRODUCTION RATE		PROUREMENT LEADTIMES		Total	Unit of Measure
			1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1		
W4008 Submarine Broadcast Upgrades	Austin Insulators, Canada	1	1	2	12	12	24	E
Lamoure Modernization (Nile 1)	Unknown	1	1	1	3	12	15	E
W4010 Nova Information Exchange Terminal (NIXT) (Nile 2)	UNIST'S Corp, Reston, VA	N/A	N/A	N/A	3	3	6	E

REMARKS:
 1) Contractor name and location will be identified once contract vehicle and contract award is determined
 2) Nova Information Exchange Terminals are COTS buys, schedule depicted is delivery schedule