Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-260

GMLRS/GMLRS AW

As of December 31, 2010

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Program Information

Designation And Nomenclature (Popular Name)

Guided Multiple Launch Rocket System (GMLRS)

DoD Component

Army

Responsible Office

Responsible Office

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Date Assigned June 12, 2007

References

SAR Baseline (Production Estimate)

Army Acquisition Executive (AAE) Approved Acquisition Program Baseline (APB) dated May 30, 2003

Approved APB

AAE Approved Acquisition Program Baseline (APB) dated June 27, 2007

Mission and Description

The mission of the Guided Multiple Launch Rocket System (GMLRS) is to attack/neutralize/suppress/destroy targets using indirect recision fires. GMLRS provides Field Artillery units with medium and long-range (over 70+ Km) fires while supporting brigade, division, corps, army, theater, Joint/Coalition Forces and Marine Air-Ground Task Forces (MAGTF) in full, limited or expeditionary operations. GMLRS rocket is a solid propellant artillery rocket deployed from the M270A1 and the High Mobility Artillery Rocket System (HIMARS) mobile launch vehicles. GMLRS uses an Inertial Measuring Unit (IMU) with Global Positioning System (GPS) assistance to guide the rocket to a specific point to deliver effects on a target. GMLRS is transported and fired in a Rocket Pod Container (RPC) that consists of six rockets. GMLRS is currently designed to carry two warhead payload variants, GMLRS Dual Purpose Improved Conventional Munitions (GMLRS DPICM) and GMLRS Unitary (GMLRS-U). A third variant of the GMLRS, the Alternative Warhead (AW), is currently in the Technology Development Phase.

GMLRS DPICM Increment 1

The GMLRS DPICM (Increment 1) has a range of over 70+ Km, contains 404 DPICM, and is used to provide precision fires on area targets including personnel and thinly armored vehicles. The GMLRS DPICM was an international cooperative development program with five nations (United States, United Kingdom, France, Germany, and Italy).

GMLRS Unitary (GMLRS-U) Increment 2

The GMLRS-U (Increment 2) is equipped with a 200-pound unitary high explosive warhead, has a range up to 70+ Km, and is effective against multiple targets. Accuracy of the rocket has been demonstrated to be significantly less than 5 meters. While extremely accurate, the single warhead also limits collateral damage to areas surrounding the designated target.

GMLRS AW Increment 3

The GMLRS AW (Increment 3) is currently designed to replace the DPICM, provide similar effects at comparable range, and eliminate the probability of Unexploded Ordnances (UXOs). All of the competing concepts for the AW will satisfy the UXO requirements as defined in the DOD Policy on Cluster Munitions and Unintended Harm to Civilians, dated June 19, 2008.

Executive Summary

The Guided Multiple Launch Rocket System (GMLRS) class Justification & Approval (J&A) was approved on February 18, 2010, for the procurement of continued Full Rate Production (FRP) V thru VII, of the GMLRS Unitary for FY 2010 - FY 2012.

GMLRS Increment 2 (Unitary) FRP-VI Contract Package was approved by the AMCOM Commanding General on October 15, 2010. Lockheed Martin Missiles Corporation submitted their proposal on December 6, 2010 and the FRP-VI Proposal Kick-off Meeting was conducted on December 15, 2010. Contract award is projected for late March 2011. The Precision Fires Rocket & Missile Systems Project Office awarded the GMLRS FRP-V Contract on May 13, 2010, for 761 GMLRS-U rocket pods and 529 Low Cost Reduced Range Practice Rocket pods with initial deliveries planned for 1st Quarter FY 2012.

The GMLRS Increment 3 Alternative Warhead (AW) Capability Development Document (CDD) has completed World Wide staffing and Army Capabilities Integration Center validation. It is currently undergoing Headquarters Department of the Army (HQDA) post-coordination, comment resolution and will be submitted to the Army Requirements Oversight Council for review in March 2011. The AW Acquisition Strategy, in support of Milestone B, was approved by the Army Acquisition Executive (AAE) on December 10, 2010. A J&A for a sole source Engineering and Manufacturing Development contract to Lockheed Martin Missiles Corporation will be submitted to the AAE for approval in March 2011.

GMLRS-AW is currently in the Technology Development Phase of acquisition, with an expected Milestone B decision in 4th Quarter 2011. On September 18, 2009, three competing warhead contractors were awarded contracts to conduct ground and flight tests demonstrations. The flight test demonstrations for the prototype warheads were completed on October 26, 2010, and the data collected is being analyzed by the Army Research Laboratory to support the Analysis of Alternatives (AoA). The AoA is being conducted by the Army Materiel Systems Analysis Activity and is scheduled to complete the final AoA report June 30, 2011. In January 2011, the three competing contractors submitted updated proposals to support final Source Selection down-select to one contract's design for inclusion in an Engineering and Manufacturing Development phase. The AW System Preliminary Design Review was completed on January 20, 2011. The GMLRS hardware will maintain approximately 80% commonality, irrelevant of which warhead is integrated into the systems (DPICM, Unitary, or AW). All of the competing concepts for the AW will satisfy the Unexploded Ordnance requirements as defined in the DoD Policy on Cluster Munitions and Unintended Harm to Civilians, dated June 19, 2008.

In the FY 2012 President's Budget submission, GMLRS Research, Development, Test and Evaluation funds were increased to provide funds for technological enhancements to the GMLRS Unitary (Increment 2) rocket; based on emerging requirements currently in the Joint Capabilities Integration Development System process. Future increments of GMLRS will utilize these enhancements to further reduce collateral damage and expand target options for the Warfighter.

There are no significant software issues with the program at this time.

Threshold Breaches

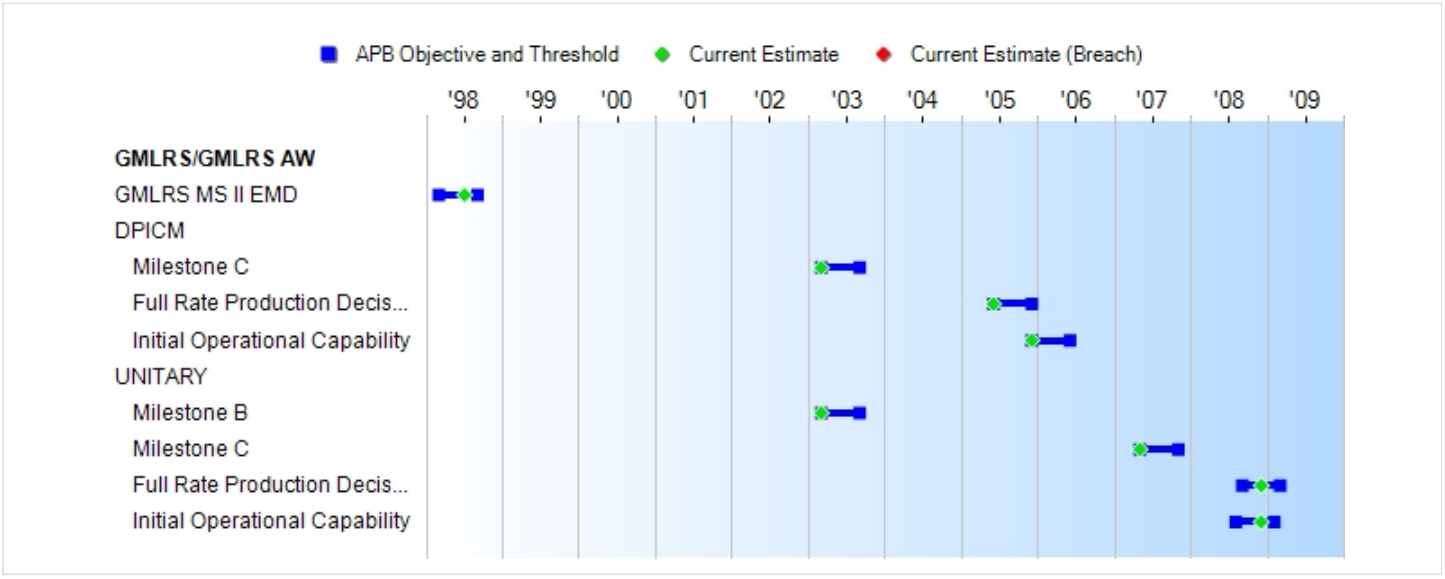
APB Breaches		
Schedule		☐
Performance		☐
Cost	RDT&E	☑
	Procurement	☐
	MILCON	☐
	Acq O&M	☐
Unit Cost	PAUC	☐
	APUC	☐

Nunn-McCurdy Breaches		
Current UCR Baseline		
	PAUC	None
	APUC	None
Original UCR Baseline		
	PAUC	None
	APUC	None

Explanation of Breach

The Current Estimate in the Cost Summary section reflects an increase to total Research, Development, Test and Evaluation cost from the June 27, 2007 Acquisition Program Baseline due to the additional requirement for an Alternative Warhead (Increment 3) program. A Program Deviation Report dated April 7, 2010, has been submitted.

Schedule



Milestones	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate
GMLRS MS II EMD	MAR 1998	MAR 1998	SEP 1998	JUL 1998
DPICM				
Milestone C	MAR 2003	MAR 2003	SEP 2003	MAR 2003
Full Rate Production Decision	MAR 2005	JUN 2005	DEC 2005	JUN 2005
Initial Operational Capability	NOV 2006	DEC 2005	JUN 2006	DEC 2005
UNITARY				
Milestone B	MAR 2003	MAR 2003	SEP 2003	MAR 2003
Milestone C	SEP 2006	MAY 2007	NOV 2007	MAY 2007
Full Rate Production Decision	SEP 2008	SEP 2008	MAR 2009	DEC 2008
Initial Operational Capability	MAR 2008	AUG 2008	FEB 2009	DEC 2008

Acronyms And Abbreviations

DPICM - Dual Purpose Improved Conventional Munition
EMD - Engineering and Manufacturing Development
GMLRS - Guided Multiple Launch Rocket System
MS - Milestone

Change Explanations

None

Performance

Characteristics	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate	
DPICM						
Range						
Max (Km)	70	70	60	73	70	
Min (Km)	10	10	15	15	10	
Effectiveness						
(Expected Fractional Damage [EFD])	30%	30%	30%	30%+	30%+	
Reliability	.95	.95	.92	.87	.92	
Hazardous Dud Rate	0	0%	2%/4%	1.71%/3.75%	1.71%/3.75%	
UNITARY						
Range						
Max (Km)	70	70	60	70+	70+	
Min (Km)	10	10	15	15	15	
Effectiveness	30%	30%	Functional Kill	TBD	30%	(Ch-1)
Reliability	.95	.95	.92	.92	.92	

Requirements Source: Operational Requirements Document (ORD)(of which DPICM is a part), dated November 3, 2003.

Acronyms And Abbreviations

DPICM - Dual Purpose Improved Conventional Munition
GMLRS - Guided Multiple Launch Rocket System
Max Km - Maximum Kilometers
Min Km - Minimum Kilometers

Change Explanations

(Ch-1) The GMLRS Unitary Effectiveness Characteristic was erroneously omitted in the December 31, 2009 SAR.

Track To Budget

RDT&E

APPN 2040	BA 07	PE 0673778A	(Army)
	Project 784	GMLRS	(Shared)
	Project 78G	GMLRS AW	

Project 784 Budget is shared with funding for an emerging requirement in support of a potential follow-on effort that will provide flexibility across the target set and reduce collateral damage. This shared effort covers FY 2013 through FY 2020.

The Project 784 Budget as shown in the February 2011 R-Forms included the shared follow-on effort above in FY 2013 to FY 2016.

Procurement

APPN 2032	BA 07		(Army)
	ICN C65404	GMLRS (Army)	
	ICN C65406	GMLRS (Army)	

ICN 65400 is the parent line for ICNs 65404 and C65406.

Per Army Budget Office P-Form Guidance, the February 2011 P-Forms showed additional FY 2012 requested Overseas Contingency Operations (OCO) dollars and associated quantity even though the OCO dollars were not included in the FY 2012 President's Budget ($19M and 210 rockets for a total FY 2012 budget of $333.167 and 2994 rockets); SAR also includes the FY 2012 OCO impacts; in all cases Army Procurement Objective remains as 43,560 rockets.

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

	BY2003 $M			BY2003 $M	TY $M		
Appropriation	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Prod Est	Current APB Production Objective	Current Estimate
RDT&E	485.4	611.7	672.9	**719.6**[1]	500.5	675.3	804.2
Procurement	9294.8	3966.7	4363.4	4157.8	11348.4	5170.4	5220.2
Flyaway	9274.1	--	--	4129.8	11325.9	--	5188.3
Recurring	9202.5	--	--	4079.3	11247.7	--	5132.1
Non Recurring	71.6	--	--	50.5	78.2	--	56.2
Support	20.7	--	--	28.0	22.5	--	31.9
Other Support	19.1	--	--	26.9	20.8	--	30.6
Initial Spares	1.6	--	--	1.1	1.7	--	1.3
MILCON	0.0	0.0	--	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	9780.2	4578.4	N/A	4877.4	11848.9	5845.7	6024.4

[1] ***APB Breach***

The confidence level used in establishing the cost estimate for GMLRS is 50% based on standard Department costing policy.

Quantity	SAR Baseline Prod Est	Current APB Production	Current Estimate
RDT&E	235	235	322
Procurement	140004	43560	43560
Total	140239	43795	43882

Cost and Funding

Funding Summary

Appropriation and Quantity Summary
FY2012 President's Budget / December 2010 SAR (TY$ M)

Appropriation	Prior	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	To Complete	Total
RDT&E	564.0	44.6	44.6	33.4	35.4	34.5	6.6	41.1	804.2
Procurement	1523.9	291.0	333.2	322.6	337.0	336.7	373.1	1702.7	5220.2
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2012 Total	2087.9	335.6	377.8	356.0	372.4	371.2	379.7	1743.8	6024.4
PB 2011 Total	2090.3	335.6	361.0	361.0	380.1	388.7	412.5	1729.7	6058.9
Delta	-2.4	0.0	16.8	-5.0	-7.7	-17.5	-32.8	14.1	-34.5

Due to a technical/timing issue, quantity and other corrections did not make the database lock for the February 2011 GMLRS P-form submission. Therefore, the projected rocket quantities from the locked data base for FY 2015 and FY 2016 shown in the February 2011 GMLRS P-form (2832 and 3286, respectively) are different from those shown in the same years in the December 31, 2010 GMLRS SAR (2838 and 3204, respectively). The FY 2015 and FY 2016 projected quantities are correct as shown in the December 31, 2010 GMLRS SAR.

Quantity	Undistributed	Prior	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	To Complete	Total
Development	322	0	0	0	0	0	0	0	0	322
Production	0	12312	2592	2994	2796	2964	2838	3204	13860	43560
PB 2012 Total	322	12312	2592	2994	2796	2964	2838	3204	13860	43882
PB 2011 Total	322	12312	2592	2802	2892	2880	2946	3486	13650	43882
Delta	0	0	0	192	-96	84	-108	-282	210	0

Cost and Funding

Annual Funding By Appropriation

Annual Funding TY$
2040 | RDT&E | Research, Development, Test, and Evaluation, Army

Fiscal Year	Quantity	End Item Recurring Flyaway TY $M	Non End Item Recurring Flyaway TY $M	Non Recurring Flyaway TY $M	Total Flyaway TY $M	Total Support TY $M	Total Program TY $M
1998	--	--	--	--	--	--	13.6
1999	--	--	--	--	--	--	17.7
2000	--	--	--	--	--	--	26.8
2001	--	--	--	--	--	--	16.8
2002	--	--	--	--	--	--	45.6
2003	--	--	--	--	--	--	59.4
2004	--	--	--	--	--	--	54.4
2005	--	--	--	--	--	--	90.0
2006	--	--	--	--	--	--	98.3
2007	--	--	--	--	--	--	43.2
2008	--	--	--	--	--	--	33.5
2009	--	--	--	--	--	--	46.3
2010	--	--	--	--	--	--	18.4
2011	--	--	--	--	--	--	44.6
2012	--	--	--	--	--	--	44.6
2013	--	--	--	--	--	--	33.4
2014	--	--	--	--	--	--	35.4
2015	--	--	--	--	--	--	34.5
2016	--	--	--	--	--	--	6.6
2017	--	--	--	--	--	--	6.7
2018	--	--	--	--	--	--	6.9
2019	--	--	--	--	--	--	6.7
2020	--	--	--	--	--	--	6.8
2021	--	--	--	--	--	--	6.9
2022	--	--	--	--	--	--	7.1
Subtotal	**322**	**--**	**--**	**--**	**--**	**--**	**804.2**

Annual Funding BY$
2040 | RDT&E | Research, Development, Test, and Evaluation, Army

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2003 $M	Non End Item Recurring Flyaway BY 2003 $M	Non Recurring Flyaway BY 2003 $M	Total Flyaway BY 2003 $M	Total Support BY 2003 $M	Total Program BY 2003 $M
1998	--	--	--	--	--	--	14.3
1999	--	--	--	--	--	--	18.4
2000	--	--	--	--	--	--	27.4
2001	--	--	--	--	--	--	17.0
2002	--	--	--	--	--	--	45.6
2003	--	--	--	--	--	--	58.3
2004	--	--	--	--	--	--	52.1
2005	--	--	--	--	--	--	83.8
2006	--	--	--	--	--	--	89.0
2007	--	--	--	--	--	--	38.2
2008	--	--	--	--	--	--	29.1
2009	--	--	--	--	--	--	39.7
2010	--	--	--	--	--	--	15.6
2011	--	--	--	--	--	--	37.3
2012	--	--	--	--	--	--	36.7
2013	--	--	--	--	--	--	27.0
2014	--	--	--	--	--	--	28.2
2015	--	--	--	--	--	--	27.0
2016	--	--	--	--	--	--	5.1
2017	--	--	--	--	--	--	5.1
2018	--	--	--	--	--	--	5.1
2019	--	--	--	--	--	--	4.9
2020	--	--	--	--	--	--	4.9
2021	--	--	--	--	--	--	4.9
2022	--	--	--	--	--	--	4.9
Subtotal	**322**	**--**	**--**	**--**	**--**	**--**	**719.6**

Annual Funding TY$
2032 | Procurement | Missile Procurement, Army

Fiscal Year	Quantity	End Item Recurring Flyaway TY $M	Non End Item Recurring Flyaway TY $M	Non Recurring Flyaway TY $M	Total Flyaway TY $M	Total Support TY $M	Total Program TY $M
2003	822	110.4	--	13.1	123.5	6.6	130.1
2004	683	97.3	--	7.0	104.3	4.7	109.0
2005	954	97.2	--	3.7	100.9	11.0	111.9
2006	984	119.8	--	0.3	120.1	1.5	121.6
2007	925	123.4	--	0.9	124.3	0.7	125.0
2008	2070	241.8	--	20.8	262.6	1.1	263.7
2009	2646	300.1	--	8.8	308.9	0.4	309.3
2010	3228	352.9	--	--	352.9	0.4	353.3
2011	2592	290.6	--	--	290.6	0.4	291.0
2012	2994	332.8	--	--	332.8	0.4	333.2
2013	2796	322.2	--	--	322.2	0.4	322.6
2014	2964	336.6	--	--	336.6	0.4	337.0
2015	2838	334.7	--	1.6	336.3	0.4	336.7
2016	3204	372.6	--	--	372.6	0.5	373.1
2017	3546	409.0	--	--	409.0	0.5	409.5
2018	3582	418.8	--	--	418.8	0.5	419.3
2019	3660	428.8	--	--	428.8	0.5	429.3
2020	3072	376.3	--	--	376.3	0.5	376.8
2021	--	--	37.9	--	37.9	0.5	38.4
2022	--	--	28.9	--	28.9	0.5	29.4
Subtotal	**43560**	**5065.3**	**66.8**	**56.2**	**5188.3**	**31.9**	**5220.2**

Annual Funding BY$
2032 | Procurement | Missile Procurement, Army

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2003 $M	Non End Item Recurring Flyaway BY 2003 $M	Non Recurring Flyaway BY 2003 $M	Total Flyaway BY 2003 $M	Total Support BY 2003 $M	Total Program BY 2003 $M
2003	822	106.1	--	12.6	118.7	6.3	125.0
2004	683	91.0	--	6.6	97.6	4.4	102.0
2005	954	88.4	--	3.4	91.8	10.0	101.8
2006	984	106.7	--	0.3	107.0	1.3	108.3
2007	925	107.8	--	0.8	108.6	0.6	109.2
2008	2070	208.2	--	17.9	226.1	0.9	227.0
2009	2646	255.8	--	7.6	263.4	0.3	263.7
2010	3228	296.9	--	--	296.9	0.4	297.3
2011	2592	240.7	--	--	240.7	0.3	241.0
2012	2994	271.2	--	--	271.2	0.3	271.5
2013	2796	258.2	--	--	258.2	0.3	258.5
2014	2964	265.2	--	--	265.2	0.3	265.5
2015	2838	259.3	--	1.3	260.6	0.3	260.9
2016	3204	283.9	--	--	283.9	0.3	284.2
2017	3546	306.4	--	--	306.4	0.4	306.8
2018	3582	308.5	--	--	308.5	0.3	308.8
2019	3660	310.6	--	--	310.6	0.3	310.9
2020	3072	268.0	--	--	268.0	0.3	268.3
2021	--	--	26.5	--	26.5	0.4	26.9
2022	--	--	19.9	--	19.9	0.3	20.2
Subtotal	**43560**	**4032.9**	**46.4**	**50.5**	**4129.8**	**28.0**	**4157.8**

Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
Approval Date	3/24/2003	3/24/2003
Approved Quantity	13998	17478
Reference	ADM	ADM
Start Year	2003	2003
End Year	2005	2008

At the Guided Multiple Launch Rocket System (GMLRS) Dual Purpose Improved Conventional Munition (DPICM) Milestone C, in the March 24, 2003, Acquisition Decision Memorandum (ADM), the Army Acquisition Executive (AAE) authorized a Low Rate Initial Production (LRIP) quantity not to exceed 13,998 rockets. This LRIP quantity was based on the Army Acquisition Objective (AAO) of 140,004. The actual GMLRS DPICM LRIP quantity was 2,459, of which 498 were GMLRS Unitary Urgent Material Release units.

In the May 7, 2006, Memorandum, the Director, Force Development, changed the AAO to an Army Procurement Objective (APO) of 43,560 rockets. At the GMLRS Unitary Milestone C, in the May 2, 2007, ADM, the AAE authorized a GMLRS Unitary LRIP quantity not to exceed 3,480 (which was based on 34,848, the total expected Procurement quantity for the GMLRS Unitary variant). The actual GMLRS Unitary LRIP quantity was 2,484 units.

The value in the table above for total LRIP approved quantity (17, 478) is the summation of 13,998 GMLRS DPICM rockets plus 3,480 GMLRS Unitary rockets.

Therefore, the current GMLRS DPICM and Unitary LRIP quantities do not exceed the 10% guideline as established in Title 10 US Code, Section 2400, Federal Acquisition Streamlining Act. The authorization for GMLRS AW LRIP quantity is also expected to be within these guidelines and will be made at GMLRS AW Milestone B, planned for 4QFY11.

Foreign Military Sales

Country	Date of Sale	Quantity	Total Cost $M	Memo
Jordan	1/17/2010	432	60.0	Unitary rockets.
Japan	2/13/2009	180	24.7	Unitary rockets.
Bahrain	12/5/2008	36	6.0	Unitary rockets.
Singapore	12/5/2007	108	15.0	Unitary rockets.
United Arab Emirates	8/1/2007	1560	212.5	DPICM and Unitary rockets.

The Memorandum of Understanding Partner nations continue to procure GMLRS rockets from the US production line.

United Kingdom, Germany and France are Cooperative Partners and are not FMS customers. The United Kingdom (UK) has procured 2844 rockets, of which over 750+ have been successfully fired in a combat environment to support US Forces. Germany has procured 444 rockets under GMLRS Full Rate Production (FRP) I, III, IV and V contracts. France has procured 270 rockets under GMLRS FRP IV and V contracts.

Nuclear Cost

None

Unit Cost

Unit Cost Report

Unit Cost	BY2003 $M Current UCR Baseline (JUN 2007 APB)	BY2003 $M Current Estimate (DEC 2010 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	4578.4	4877.4	
Quantity	43795	43882	
Unit Cost	0.105	0.111	+5.71
Average Procurement Unit Cost (APUC)			
Cost	3966.7	4157.8	
Quantity	43560	43560	
Unit Cost	0.091	0.095	+4.40

Unit Cost	BY2003 $M Revised Original UCR Baseline (JUN 2007 APB)	BY2003 $M Current Estimate (DEC 2010 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	4578.4	4877.4	
Quantity	43795	43882	
Unit Cost	0.105	0.111	+5.71
Average Procurement Unit Cost (APUC)			
Cost	3966.7	4157.8	
Quantity	43560	43560	
Unit Cost	0.091	0.095	+4.40

In accordance with the April 26, 2007 Acquisition Decision Memorandum, separate APUCs and PAUCs have been prepared for all Guided Multiple Launch Rocket System (GMLRS) configurations [Dual Purpose Improved Conventional Munitions (DPICM) and Unitary]. The GMLRS hardware will maintain approximately 80% commonality, irrelevant of which warhead is integrated into the systems. Consequently, changes in cost of any variant will directly affect the APUCs and PAUCs of the others. The split-out for the Alternative Warhead (AW) variant will be included after the AW Milestone B.

The split-out APUC and PAUC of the GMLRS variants are as follows:

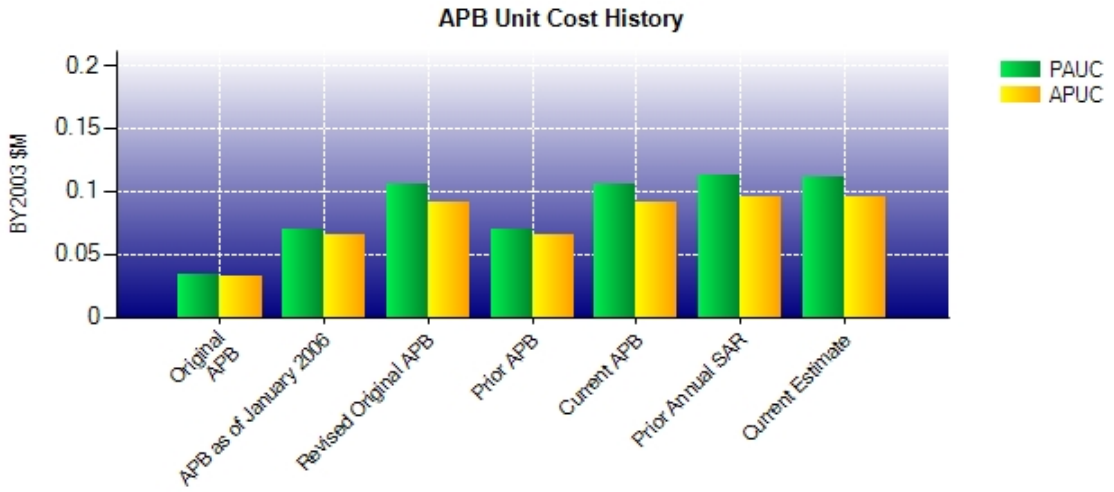
DPICM APUC ($.134M [BY 03$]; Qty = 2472)
UNITARY APUC ($ .093M [BY 03$]; Qty = 34848)

DPICM PAUC ($ .191M [BY 03$]; Qty = 2565)
UNITARY PAUC ($ .102M [BY 03$]; Qty = 34990)

Because all GMLRS Variants benefit from the Research, Development, Test and Evaluation future system

enhancements (Insensitive Munitions, obsolescence, cost reduction initiatives), an artificial pro-ration would have to be made to include them in the split-out PAUCs above. Therefore, the split-out PAUCs above exclude the funding for these future enhancements. However, these dollars are included in the composite PAUC shown in the Unit Cost section.

Unit Cost History



		BY2003 $M		TY $M	
	Date	PAUC	APUC	PAUC	APUC
Original APB	MAR 1998	0.034	0.032	0.039	0.037
APB as of January 2006	MAY 2003	0.070	0.066	0.084	0.081
Revised Original APB	JUN 2007	0.105	0.091	0.133	0.119
Prior APB	MAY 2003	0.070	0.066	0.084	0.081
Current APB	JUN 2007	0.105	0.091	0.133	0.119
Prior Annual SAR	DEC 2009	0.112	0.095	0.138	0.120
Current Estimate	DEC 2010	0.111	0.095	0.137	0.120

SAR Unit Cost History

Initial SAR Baseline to Current SAR Baseline (TY $M)

Initial PAUC Dev Est	Changes								PAUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.039	-0.003	0.001	0.001	0.009	0.037	0.000	0.000	0.045	0.084

Current SAR Baseline to Current Estimate (TY $M)

PAUC Prod Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.084	0.011	-0.013	0.029	0.000	0.025	0.000	0.000	0.053	0.137

Initial SAR Baseline to Current SAR Baseline (TY $M)

Initial APUC Dev Est	Changes								APUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.037	-0.003	0.004	0.001	0.006	0.036	0.000	0.000	0.044	0.081

Current SAR Baseline to Current Estimate (TY $M)

APUC Prod Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.081	0.011	-0.025	0.029	0.000	0.023	0.000	0.000	0.039	0.120

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone I	N/A	N/A	N/A	N/A
Milestone II	N/A	MAR 1998	MAR 1998	JUL 1998
Milestone C	N/A	OCT 2003	N/A	N/A
IOC	N/A	APR 2004	N/A	N/A
Total Cost (TY $M)	N/A	1688.6	11848.9	6024.4
Total Quantity	N/A	43182	140239	43882
Prog. Acq. Unit Cost (PAUC)	N/A	0.039	0.084	0.137

The Milestone C and Initial Operational Capability (IOC) reported above reflect the Dual Purpose Improved Conventional Munition (DPICM) variant. Milestone C for Unitary variant was approved May 2007.

Cost Variance

Cost Variance Summary

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	500.5	11348.4	--	11848.9
Previous Changes				
Economic	+5.5	+497.3	--	+502.8
Quantity	+190.1	-8922.7	--	-8732.6
Schedule	+8.7	+1270.4	--	+1279.1
Engineering	--	+10.8	--	+10.8
Estimating	+128.7	+1013.1	--	+1141.8
Other	--	--	--	--
Support	--	+8.1	--	+8.1
Subtotal	+333.0	-6123.0	--	-5790.0
Current Changes				
Economic	-0.7	-7.4	--	-8.1
Quantity	--	--	--	--
Schedule	--	+0.4	--	+0.4
Engineering	--	--	--	--
Estimating	-28.6	+1.9	--	-26.7
Other	--	--	--	--
Support	--	-0.1	--	-0.1
Subtotal	-29.3	-5.2	--	-34.5
Total Changes	+303.7	-6128.2	--	-5824.5
CE - Cost Variance	804.2	5220.2	--	6024.4
CE - Cost & Funding	804.2	5220.2	--	6024.4

Summary Base Year 2003 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	485.4	9294.8	--	9780.2
Previous Changes				
Economic	--	--	--	--
Quantity	+154.4	-5929.7	--	-5775.3
Schedule	+8.2	+215.9	--	+224.1
Engineering	--	+8.5	--	+8.5
Estimating	+94.6	+559.6	--	+654.2
Other	--	--	--	--
Support	--	+7.2	--	+7.2
Subtotal	+257.2	-5138.5	--	-4881.3
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-23.0	+1.4	--	-21.6
Other	--	--	--	--
Support	--	+0.1	--	+0.1
Subtotal	-23.0	+1.5	--	-21.5
Total Changes	+234.2	-5137.0	--	-4902.8
CE - Cost Variance	719.6	4157.8	--	4877.4
CE - Cost & Funding	719.6	4157.8	--	4877.4

Previous Estimate: December 2009

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	-0.7
Reduced Alternative Warhead contractor test support estimate. (Estimating)	-3.8	-4.4
Change in Obsolescence estimate due to Army Budget changes. (Estimating)	-18.5	-23.3
Reduced Insensitive Munitions FY 2010 estimate to actuals (Estimating)	-0.8	-1.0
Adjustment for current and prior escalation. (Estimating)	+0.1	+0.1
RDT&E Subtotal	-23.0	-29.3

Procurement	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	-7.4
Procurement buy profile adjusted to align with budget. (Schedule)	0.0	+0.4
Adjustment for current and prior escalation. (Estimating)	+0.4	+0.5
Decreased estimate for MLRS Family of Munitions Common Test Device Upgrade. (Estimating)	-1.4	-2.3
Increased estimate for Telemetry Kit cost. (Estimating)	+3.8	+5.3
Decreased estimate due to requested FY 2012 Overseas Contingency Operations rockets and AW Production Cut-in schedule adjustment from FY 2014 to FY 2015 in order to align with completion of the AW Engineering and Manufacturing Development Program. (Estimating)	-1.4	-1.6
Adjustment for current and prior escalation. (Support)	+0.1	+0.1
Decreased estimate of the Initial depot spares for AW. (Support)	0.0	-0.1
Decreased estimate for training device maintenance. (Support)	0.0	-0.1
Procurement Subtotal	+1.5	-5.2

Contracts

Appropriation: Procurement

Contract Name	**GMLRS FRP I**
Contractor	LMMFC-D
Contractor Location	Grand Prairie, TX 75051-0000
Contract Number, Type	W31P4Q-06-C-0002, FFP
Award Date	December 28, 2005
Definitization Date	December 28, 2005

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
82.8	N/A	822	176.2	N/A	1772	175.6	175.6

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this FFP contract.

Contract Comments

GMLRS Full Rate Production (FRP) I Contract W31P4Q-06-C-0002 was initially awarded December 28, 2005, for 822 rockets (Army) and associated support.

Since this is a production/ FFP contract, there is no single or particular reason for contract value changes over a period of time. The difference between the initial target number and the current number can either be option exercises, change order incorporations, negotiated reopener clauses, etc. Therefore these instruments can experience various up and down dollar changes over the years.

Appropriation: Procurement

Contract Name	**GMLRS FRP II**
Contractor	LMMFC-D
Contractor Location	Grand Prairie, TX 75051-0000
Contract Number, Type	W31P4Q-07-C-0001, FFP
Award Date	December 22, 2006
Definitization Date	December 22, 2006

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
78.0	N/A	702	253.9	N/A	2298	253.8	256.8

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this FFP contract.

Contract Comments

Since this is a production/ FFP contract, there is no single or particular reason for contract value changes over a period of time. The difference between the initial target number and the current number can either be option exercises, change order incorporations, negotiated reopener clauses, etc. Therefore these instruments can experience various up and down dollar changes over the years.

Appropriation: Procurement

Contract Name	**GMLRS FRP III**
Contractor	LMMFC-D
Contractor Location	Grand Prairie, TX 75051-0000
Contract Number, Type	W31P4Q-08-C-0021, FFP
Award Date	December 27, 2007
Definitization Date	December 27, 2007

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
245.6	N/A	2184	444.6	N/A	4268	442.4	442.4

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this FFP contract.

Contract Comments

Since this is a production/ FFP contract, there is no single or particular reason for contract value changes over a period of time. The difference between the initial target number and the current number can either be option exercises, change order incorporations, negotiated reopener clauses, etc. Therefore these instruments can experience various up and down dollar changes over the years.

Appropriation: Procurement

Contract Name	**GMLRS FRP IV**
Contractor	LMMC-D
Contractor Location	Grand Prairie, TX 75051-0000
Contract Number, Type	W31P4Q-09-3-0001, FFP/CPFF
Award Date	December 29, 2008
Definitization Date	December 29, 2008

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
371.6	N/A	3582	548.2	N/A	3582	548.2	548.2

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this FFP/CPFF contract.

Contract Comments

Appropriation: Procurement

Contract Name	**GMLRS FRP V**
Contractor	LMMFC-D
Contractor Location	Grand Prairie, TX 75051-0000
Contract Number, Type	W31P4Q-10-C-0270, FFP/CPFF
Award Date	May 13, 2010
Definitization Date	July 12, 2010

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
474.2	N/A	4566	474.2	N/A	4566	474.2	474.2

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this FFP/CPFF contract.

Contract Comments

This is the first time this contract is being reported.

Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	427	235	322	72.98%
Production	9642	9642	43560	22.13%
Total Program Quantities Delivered	10069	9877	43882	22.51%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	6024.4	Years Appropriated	14
Expenditures To Date	1477.0	Percent Years Appropriated	56.00%
Percent Expended	24.52%	Appropriated to Date	2423.5
Total Funding Years	25	Percent Appropriated	40.23%

Operating and Support Cost

Assumptions And Ground Rules

The unit of measure for tracking Operating and Support (O&S) costs is the Rocket Pod.

The service life of the GMLRS system is ten (10) years.

TOTAL ROCKET QTY	43560
TOTAL POD QTY	7260

Costs BY2003 $K		
Cost Element	**GMLRS/GMLRS AW Avg Annual Cost per Rocket Pod**	**No GMLRS Antecedent**
Unit-Level Manpower	0.088	--
Unit Operations	0.000	--
Maintenance	0.000	--
Sustaining Support	1.158	--
Continuing System Improvements	0.223	--
Indirect Support	0.657	--
Other	0.596	--
Total Unitized Cost (Base Year 2003 $)	2.722	--

Total O&S Costs $M	GMLRS/GMLRS AW	No GMLRS Antecedent
Base Year	197.7	--
Then Year	285.2	--