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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2024 Army **Date:** March 2023

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| <b>Appropriation/Budget Activity</b><br>2040: Research, Development, Test & Evaluation, Army / BA 7: Operational Systems Development | <b>R-1 Program Element (Number/Name)</b><br>PE 0205778A / Guided Multiple-Launch Rocket System (GMLRS) |
|--|--|

| COST (\$ in Millions)           | Prior Years | FY 2022 | FY 2023 | FY 2024 Base | FY 2024 OCO | FY 2024 Total | FY 2025 | FY 2026 | FY 2027 | FY 2028 | Cost To Complete | Total Cost |
|---------------------------------|-------------|---------|---------|--------------|-------------|---------------|---------|---------|---------|---------|------------------|------------|
| Total Program Element           | -           | 58.516  | 20.180  | 75.952       | -           | 75.952        | 45.549  | 45.603  | 40.730  | 41.185  | 0.000            | 327.715    |
| EG2: GMLRS Alternative Warheads | -           | 23.209  | -       | 25.264       | -           | 25.264        | -       | -       | -       | -       | 0.000            | 48.473     |
| EG3: Guided MLRS                | -           | 35.307  | 20.180  | 50.688       | -           | 50.688        | 45.549  | 45.603  | 40.730  | 41.185  | 0.000            | 279.242    |

**Program MDAP/MAIS Code:** 260

**A. Mission Description and Budget Item Justification**

Guided Multiple-Launch Rocket System (GMLRS) rockets are surface-to-surface artillery rockets fired from the Multiple Launch Rocket System (MLRS) and High Mobility Artillery Rocket System (HIMARS) launchers. GMLRS rockets provide 24/7, all-weather precision fires to engage both area and point targets at short, medium, and long ranges. The GMLRS Program currently consists of multiple variants: GMLRS Unitary utilizes a 200-pound high explosive warhead to engage point targets with limited collateral damage; GMLRS Dual Purpose Improved Conventional Munition (DPICM) cluster munition to engage area or imprecisely located targets and GMLRS Alternative Warhead (AW) which has been developed as a non-cluster munition to engage the same target set as GMLRS DPICM. GMLRS DPICM Production was terminated in response to the June 2008 Department of Defense (DoD) Cluster Munitions Policy. GMLRS Unitary and AW are currently in full rate production.

The 26 October 2016 Deputy Secretary's Management Action Group (DMAG) directed the Army to define and execute an effort for GMLRS modifications that would extend the maximum range (Extended Range (ER) GMLRS) and integrate sensors and seekers into the rocket to engage complex targets with greater precision at greater ranges. These modifications to GMLRS were designated by the Army Acquisition Executive as an engineering change proposal (ECP) and not as a new program. The Army prioritized the development and integration of an Enhanced Alternative Warhead (EAW) over support for the seeker spiral.

The GMLRS program is a component of an integrated fires development effort that includes survivability, resiliency, and effectiveness improvements against advanced threats from near-peer adversaries. These efforts include integration with an evolving common fires mission command, common development tools and processes, and annual test and evaluation to provide data to support program assessments and progress toward closure of performance gaps.

The GMLRS program will continue to leverage ongoing Government and Industry research and development efforts to extend range, increase survivability, and enhance lethality. The Project EG2: GMLRS Alternative Warheads funding line is used to support EAW system development (hardware, rocket and launcher software) as well as component and system level qualification, integration, and test into standard range GMLRS rocket. The Project EG3: Guided MLRS funding line supports GMLRS enhancements including development of system and component level requirements for a Sensor Fuzed Weapon (SFW), development of Assured Positioning, Navigation, and Timing (APNT), and long lead ER GMLRS components needed to support integration of EAW.

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| <b>Exhibit R-2, RDT&amp;E Budget Item Justification: PB 2024 Army</b> | <b>Date: March 2023</b> |
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| <b>Appropriation/Budget Activity</b><br>2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 7: Operational Systems Development</i> | <b>R-1 Program Element (Number/Name)</b><br>PE 0205778A / <i>Guided Multiple-Launch Rocket System (GMLRS)</i> |
|---|---|

| <b>B. Program Change Summary (\$ in Millions)</b> | <u>FY 2022</u> | <u>FY 2023</u> | <u>FY 2024 Base</u> | <u>FY 2024 OCO</u> | <u>FY 2024 Total</u> |
|---|----------------|----------------|---------------------|--------------------|----------------------|
| Previous President's Budget                       | 60.733         | 20.180         | 51.759              | -                  | 51.759               |
| Current President's Budget                        | 58.516         | 20.180         | 75.952              | -                  | 75.952               |
| Total Adjustments                                 | -2.217         | 0.000          | 24.193              | -                  | 24.193               |
| • Congressional General Reductions                | -              | -              |                     |                    |                      |
| • Congressional Directed Reductions               | -              | -              |                     |                    |                      |
| • Congressional Rescissions                       | -              | -              |                     |                    |                      |
| • Congressional Adds                              | -              | -              |                     |                    |                      |
| • Congressional Directed Transfers                | -              | -              |                     |                    |                      |
| • Reprogrammings                                  | -2.217         | -              |                     |                    |                      |
| • SBIR/STTR Transfer                              | -              | -              |                     |                    |                      |
| • Adjustments to Budget Years                     | -              | -              | 24.193              | -                  | 24.193               |

**Change Summary Explanation**

The increase in Fiscal Year (FY) 2024 funding will be used to initiate Sensor Fuzed Weapon demonstration.

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|--|--------------------|----------------|----------------|---------------------|--|----------------------|----------------|----------------|--|-------------------------|-------------------------|-------------------|
| <b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Army |                    |                |                |                     |  |                      |                |                |  | <b>Date:</b> March 2023 |                         |                   |
| <b>Appropriation/Budget Activity</b><br>2040 / 7                   |                    |                |                |                     | <b>R-1 Program Element (Number/Name)</b><br>PE 0205778A / Guided Multiple-Launch Rocket System (GMLRS) |                      |                |                | <b>Project (Number/Name)</b><br>EG2 / GMLRS Alternative Warheads |                         |                         |                   |
| <b>COST (\$ in Millions)</b>                                       | <b>Prior Years</b> | <b>FY 2022</b> | <b>FY 2023</b> | <b>FY 2024 Base</b> | <b>FY 2024 OCO</b>   | <b>FY 2024 Total</b> | <b>FY 2025</b> | <b>FY 2026</b> | <b>FY 2027</b>   | <b>FY 2028</b>          | <b>Cost To Complete</b> | <b>Total Cost</b> |
| EG2: GMLRS Alternative Warheads                                    | -                  | 23.209         | -              | 25.264              | -  | 25.264               | -              | -              | -  | -                       | 0.000                   | 48.473            |
| Quantity of RDT&E Articles   | -                  | -              | -              | -                   | -  | -                    | -              | -              | -  | -                       |                         |                   |

**A. Mission Description and Budget Item Justification**

The U.S. Army initially funded the development of the Guided Multiple Launch Rocket System (GMLRS) Alternative Warhead (AW) increment under the Project EG2: GMLRS Alternative Warheads project code. GMLRS AW entered full rate production in 2015. The 26 October 2016 Deputy Secretary's Management Action Group (DMAG) directed the Army to define and execute an effort for a GMLRS modification that would integrate a seeker into the rocket. The Army prioritized integration of an Enhanced Alternative Warhead (EAW) into a standard range GMLRS rocket over continuation of the seeker spiral.

FY 2024 dollars in the amount of \$25.264 million will fund component development and qualification and continue software efforts for the EAW.

**B. Accomplishments/Planned Programs (\$ in Millions)**

|  | <b>FY 2022</b> | <b>FY 2023</b> | <b>FY 2024</b> |
|--|----------------|----------------|----------------|
| <b>Title:</b> Enhanced Alternative Warhead   | 23.209         | -              | 25.264         |
| <b>Description:</b> The Enhanced Alternative Warhead effort modifies the AW warhead, proximity sensor, and warhead fuze for increased lethality against light and medium armored targets.                |                |                |                |
| <b>FY 2024 Plans:</b><br>Continue component development and qualification testing. Continue development and testing of updates to launcher fire control software and rocket operational flight software. |                |                |                |
| <b>FY 2023 to FY 2024 Increase/Decrease Statement:</b><br>This effort was funded under Project EG3: Guided MLRS in FY 2023.  |                |                |                |
| <b>Accomplishments/Planned Programs Subtotals</b>  | 23.209         | -              | 25.264         |

**C. Other Program Funding Summary (\$ in Millions)**

| <b>Line Item</b>                     | <b>FY 2022</b> | <b>FY 2023</b> | <b>FY 2024 Base</b> | <b>FY 2024 OCO</b> | <b>FY 2024 Total</b> | <b>FY 2025</b> | <b>FY 2026</b> | <b>FY 2027</b> | <b>FY 2028</b> | <b>Cost To Complete</b> | <b>Total Cost</b> |
|--------------------------------------|----------------|----------------|---------------------|--------------------|----------------------|----------------|----------------|----------------|----------------|-------------------------|-------------------|
| • C64400: Guided MLRS Rocket (GMLRS) | 1,130.519      | 1,312.028      | 942.280             | -                  | 942.280              | 1,214.127      | 1,321.161      | 1,254.264      | 1,336.417      | Continuing              | Continuing        |
| • EG3: Guided MLRS                   | 35.307         | 20.180         | 50.688              | -                  | 50.688               | 45.549         | 45.603         | 40.730         | 41.185         | Continuing              | Continuing        |

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| <b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Army |   | <b>Date:</b> March 2023   |
| <b>Appropriation/Budget Activity</b><br>2040 / 7                   | <b>R-1 Program Element (Number/Name)</b><br>PE 0205778A / <i>Guided Multiple-Launch Rocket System (GMLRS)</i> | <b>Project (Number/Name)</b><br>EG2 / <i>GMLRS Alternative Warheads</i> |

**C. Other Program Funding Summary (\$ in Millions)**

| <u>Line Item</u> | <u>FY 2022</u> | <u>FY 2023</u> | <u>FY 2024</u><br><u>Base</u> | <u>FY 2024</u><br><u>OCO</u> | <u>FY 2024</u><br><u>Total</u> | <u>FY 2025</u> | <u>FY 2026</u> | <u>FY 2027</u> | <u>FY 2028</u> | <u>Cost To</u><br><u>Complete</u> | <u>Total Cost</u> |
|------------------|----------------|----------------|-------------------------------|------------------------------|--------------------------------|----------------|----------------|----------------|----------------|-----------------------------------|-------------------|
|------------------|----------------|----------------|-------------------------------|------------------------------|--------------------------------|----------------|----------------|----------------|----------------|-----------------------------------|-------------------|

**Remarks**

GMLRS missile Army procurement funding (MiPA) includes C65404 and C65406.

**D. Acquisition Strategy**

The GMLRS EAW lethality enhancement will service the existing GMLRS targets while adding capability against light/medium armored targets. The lead system integrator will enhance GMLRS M30A2 lethality by integrating a modified alternative warhead, new ESAF, and modified legacy proximity sensor. System Preliminary Design Review (PDR) is scheduled for 2nd Quarter FY 2023 and Critical Design Review (CDR) is scheduled for 1st Quarter FY 2025. System integrator will conduct component and system level qualification testing (arena, ground, flight) and production line validation. Components will be qualified to both GMLRS and ER GMLRS standards (most stringent). The end state is a qualified munition with a new nomenclature, ready for production cut-in as an ECP, to the existing GMLRS production line after qualification is completed in FY 2026. Contract cut-in is planned for the FY 2026 Production Lot contract award.

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army** **Date:** March 2023

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| <b>Appropriation/Budget Activity</b><br>2040 / 7 | <b>R-1 Program Element (Number/Name)</b><br>PE 0205778A / Guided Multiple-Launch Rocket System (GMLRS) | <b>Project (Number/Name)</b><br>EG2 / GMLRS Alternative Warheads |
|--|--|--|

| <b>Management Services (\$ in Millions)</b> |                        |                                |             | FY 2022 |            | FY 2023 |            | FY 2024 Base |            | FY 2024 OCO |            | FY 2024 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|------------------------|--------------------------------|-------------|---------|------------|---------|------------|--------------|------------|-------------|------------|---------------|------------------|------------|--------------------------|
| Cost Category Item                          | Contract Method & Type | Performing Activity & Location | Prior Years | Cost    | Award Date | Cost    | Award Date | Cost         | Award Date | Cost        | Award Date | Cost          |                  |            |                          |
| Government Program Management               | Various                | STORM Project Office : RSA     | 9.464       | 3.018   | Jan 2022   | -       |            | 1.375        | Jan 2024   | -           |            | 1.375         | 0.000            | 13.857     | -                        |
| <b>Subtotal</b>                             |                        |                                | 9.464       | 3.018   |            | -       |            | 1.375        |            | -           |            | 1.375         | 0.000            | 13.857     | N/A                      |

**Remarks**  
STORM-Strategic and Operational Rockets and Missiles; RSA-Redstone Arsenal

| <b>Product Development (\$ in Millions)</b> |                        |                                |             | FY 2022 |            | FY 2023 |            | FY 2024 Base |            | FY 2024 OCO |            | FY 2024 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|------------------------|--------------------------------|-------------|---------|------------|---------|------------|--------------|------------|-------------|------------|---------------|------------------|------------|--------------------------|
| Cost Category Item                          | Contract Method & Type | Performing Activity & Location | Prior Years | Cost    | Award Date | Cost    | Award Date | Cost         | Award Date | Cost        | Award Date | Cost          |                  |            |                          |
| Other Government Agencies                   | MIPR                   | CCDC/AvMC : RSA                | 8.353       | 3.288   | Jan 2022   | -       |            | 10.198       | Jan 2024   | -           |            | 10.198        | 0.000            | 21.839     | -                        |
| Enhanced Alternative Warhead                | C/CPFF                 | Kord : Huntsville, AL          | 8.688       | 16.621  | Mar 2022   | -       |            | 6.310        | Jan 2024   | -           |            | 6.310         | 0.000            | 31.619     | -                        |
| AWP Contracts (Multiple)                    | TBD                    | LMMCF : Dallas, TX             | 9.955       | 0.282   |            | -       |            | 6.481        | Jan 2024   | -           |            | 6.481         | 0.000            | 16.718     | -                        |
| <b>Subtotal</b>                             |                        |                                | 26.996      | 20.191  |            | -       |            | 22.989       |            | -           |            | 22.989        | 0.000            | 70.176     | N/A                      |

**Remarks**  
AWP-Alternative Warhead Program; Various-Competitive/Firm Fixed Price/Sole Source/Cost Plus Fixed Fee; CCDC-Combat Capabilities Development Command; AvMC-Aviation and Missile Center; RSA-Redstone Arsenal; NGDS-Northrop Grumman Defense Systems; MN-Minnesota; LMMFC-Lockheed Martin Missile and Fire Control; TX-Texas; AL-Alabama

| <b>Test and Evaluation (\$ in Millions)</b> |                        |  |             | FY 2022 |            | FY 2023 |            | FY 2024 Base |            | FY 2024 OCO |            | FY 2024 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|------------------------|--|-------------|---------|------------|---------|------------|--------------|------------|-------------|------------|---------------|------------------|------------|--------------------------|
| Cost Category Item                          | Contract Method & Type | Performing Activity & Location         | Prior Years | Cost    | Award Date | Cost    | Award Date | Cost         | Award Date | Cost        | Award Date | Cost          |                  |            |                          |
| Test Support for EAW                        | MIPR                   | WSMR, RTC, AVMC : NM, Redstone Arsenal | 1.076       | -       |            | -       |            | 0.900        | Jan 2024   | -           |            | 0.900         | 0.000            | 1.976      | -                        |
| <b>Subtotal</b>                             |                        |  | 1.076       | -       |            | -       |            | 0.900        |            | -           |            | 0.900         | 0.000            | 1.976      | N/A                      |



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| <b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2024 Army</b> |  | <b>Date:</b> March 2023  |
| <b>Appropriation/Budget Activity</b><br>2040 / 7             | <b>R-1 Program Element (Number/Name)</b><br>PE 0205778A / Guided Multiple-Launch Rocket System (GMLRS) | <b>Project (Number/Name)</b><br>EG2 / GMLRS Alternative Warheads |

| Event Name   | FY 2022  |   |   |   | FY 2023 |   |   |   | FY 2024 |   |   |   | FY 2025 |   |   |   | FY 2026 |   |   |   | FY 2027 |   |   |   | FY 2028 |   |   |   |
|--|--|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|
|  | 1  | 2 | 3 | 4 | 1       | 2 | 3 | 4 | 1       | 2 | 3 | 4 | 1       | 2 | 3 | 4 | 1       | 2 | 3 | 4 | 1       | 2 | 3 | 4 | 1       | 2 | 3 | 4 |
| Enhanced Alternative Warhead into Standard Range GMLRS | [Blue bar spanning FY 2022 through FY 2026]                      |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| Component Level Design through CDRs                    | [Blue bar spanning FY 2022 through FY 2024]                      |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| System Level PDR                                       | [Blue triangle '1' in FY 2023, Quarter 2]                        |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| EDT Flight Testing                                     | [Blue bar spanning FY 2024, Quarters 1-2]                        |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| System Level CDR                                       | [Blue triangle '2' in FY 2025, Quarter 1]                        |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| Component Qualification Testing                        | [Blue bar spanning FY 2023, Quarters 3-4; FY 2024, Quarters 1-3] |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| System Qualification Flight Testing                    | [Blue bar spanning FY 2026, Quarters 1-2]                        |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |

**Note**  
Enhanced Alternative Warhead development and qualification efforts into Standard Range GMLRS have been shared between Projects EG2 and EG3 funding lines. Continuation of this effort beyond FY 2024 is planned to be funded on under Project EG3.

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| <b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2024 Army |   | <b>Date:</b> March 2023   |
| <b>Appropriation/Budget Activity</b><br>2040 / 7              | <b>R-1 Program Element (Number/Name)</b><br>PE 0205778A / <i>Guided Multiple-Launch Rocket System (GMLRS)</i> | <b>Project (Number/Name)</b><br>EG2 / <i>GMLRS Alternative Warheads</i> |

Schedule Details

| Events   | Start   |      | End     |      |
|--|---------|------|---------|------|
|  | Quarter | Year | Quarter | Year |
| Enhanced Alternative Warhead into Standard Range GMLRS | 2       | 2020 | 4       | 2026 |
| Component Level Design through CDRs                    | 2       | 2020 | 4       | 2024 |
| System Level PDR                                       | 2       | 2023 | 2       | 2023 |
| EDT Flight Testing                                     | 1       | 2024 | 3       | 2024 |
| System Level CDR                                       | 1       | 2025 | 1       | 2025 |
| Component Qualification Testing                        | 3       | 2023 | 2       | 2025 |
| System Qualification Flight Testing                    | 2       | 2026 | 4       | 2026 |

**Note**

Enhanced Alternative Warhead development and qualification efforts into Standard Range GMLRS have been shared between EG2 and EG3 funding lines. Continuation of this effort beyond FY 2024 is planned to be funded under EG3.

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**Exhibit R-2A, RDT&E Project Justification:** PB 2024 Army **Date:** March 2023

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| <b>Appropriation/Budget Activity</b><br>2040 / 7 | <b>R-1 Program Element (Number/Name)</b><br>PE 0205778A / Guided Multiple-Launch Rocket System (GMLRS) | <b>Project (Number/Name)</b><br>EG3 / Guided MLRS |
|--|--|---|

| COST (\$ in Millions)      | Prior Years | FY 2022 | FY 2023 | FY 2024 Base | FY 2024 OCO | FY 2024 Total | FY 2025 | FY 2026 | FY 2027 | FY 2028 | Cost To Complete | Total Cost |
|----------------------------|-------------|---------|---------|--------------|-------------|---------------|---------|---------|---------|---------|------------------|------------|
| EG3: <i>Guided MLRS</i>    | -           | 35.307  | 20.180  | 50.688       | -           | 50.688        | 45.549  | 45.603  | 40.730  | 41.185  | 0.000            | 279.242    |
| Quantity of RDT&E Articles | -           | -       | -       | -            | -           | -             | -       | -       | -       | -       |                  |            |

**A. Mission Description and Budget Item Justification**

The U.S. Army continues to explore ways to enhance Guided Multiple Launch Rocket System (GMLRS) rockets and common components and to mitigate aging technology issues under Project EG3: Guided MLRS. The Army is requesting funding for the following GMLRS Research, Development, Test and Evaluation (RDT&E) activities: (1) demonstration of Sensor Fuzed Weapon (SFW) payload prototypes to provide enhanced operational capabilities; (2) investigation of potential cost reduction initiatives; (3) Preplanned Product Improvement (P3I); (4) evaluation and development of technologies to enhance overall product performance and survivability to include Assured Positioning, Navigation and Timing (APNT); and (5) system test and evaluation.

FY 2024 dollars in the amount of \$50.688 million will support:

\*Next Generation Guidance Set development in support of APNT requirements

\*The SFW effort to evaluate and select payloads for integration into GMLRS/ ER GMLRS in order to demonstrate a capability to defeat medium and heavy armored targets at significantly increased ranges

\*Begin work on integration of Enhanced Alternative Warhead into an ER GMLRS.

**B. Accomplishments/Planned Programs (\$ in Millions)**

|   | FY 2022 | FY 2023 | FY 2024 |
|---|---------|---------|---------|
| <p><b>Title:</b> GMLRS enhancements</p> <p><b>Description:</b> Develop and assess methods to improve rocket effectiveness. Continue to assess payload, motor, and guidance/control options to meet Objective Additional Performance Attributes (APAs).</p> <p><b>FY 2023 Plans:</b><br/>FY 2023 funds system level test activities of the Enhanced Alternative Warhead (EAW) into a standard range GMLRS rocket.</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b><br/>SFW and ERG EAW efforts are captured separately. EAW efforts for Standard Range are funded under Project EG2: GMLRS Alternative Warheads in FY 2024.</p> | 7.711   | 12.575  | -       |
| <p><b>Title:</b> GMLRS Assured Position Navigation and Timing (APNT)</p> <p><b>Description:</b> Address GMLRS munition-specific requirements related to maintaining accuracy in a contested environment, improving accuracy over longer ranges, and compliance with statutory GPS requirements.</p> <p><b>FY 2023 Plans:</b></p>  | 12.256  | 1.070   | 3.077   |

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| <b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Army  |   | <b>Date:</b> March 2023                                  |                |                |
| <b>Appropriation/Budget Activity</b><br>2040 / 7  | <b>R-1 Program Element (Number/Name)</b><br>PE 0205778A / <i>Guided Multiple-Launch Rocket System (GMLRS)</i> | <b>Project (Number/Name)</b><br>EG3 / <i>Guided MLRS</i> |                |                |
| <b>B. Accomplishments/Planned Programs (\$ in Millions)</b>   |   | <b>FY 2022</b>   | <b>FY 2023</b> | <b>FY 2024</b> |
| Evaluate and assess candidate APNT technologies to support future iterations of improved navigation, mitigation of dependence on GPS, and perform threat susceptibility.<br><br><b>FY 2024 Plans:</b><br>Initiate development of a next generation guidance set for the GMLRS system future production. Develop specifications, down-select Increment-2 M-Code receiver and antennas supporting anti-jam capability. Purchase receiver and antenna hardware to facilitate guidance set requirements development.<br><br><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b><br>Funds in FY 2023 prioritized towards EAW and ER GMLRS development, qualification, and software efforts. |   |  |                |                |
| <b>Title:</b> Extended Range (ER) GMLRS and complementary rocket pod development<br><br><b>Description:</b> Complete rocket pod development and conduct system level ground and flight tests.<br><br><b>FY 2023 Plans:</b><br>System qualification flight testing for ER GMLRS<br><br><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b><br>It is expected that ER GMLRS qualification and operational testing shall complete in FY 2023.   |   | 5.469  | 3.825          | -              |
| <b>Title:</b> Extended Range (ER) GMLRS development<br><br><b>Description:</b> Qualification and integration of ER GMLRS.<br><br><b>FY 2023 Plans:</b><br>Continue launcher software integration associated with ERG.<br><br><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b><br>It is expected that ER GMLRS qualification and operational testing shall complete in FY 2023.  |   | 9.871  | 1.973          | -              |
| <b>Title:</b> Sensor Fuzed Weapon (SFW) Payload<br><br><b>Description:</b> The Sensor Fuzed Weapon (SFW) will provide capability to engage against armored and mechanized forces utilizing the ER GMLRS as the delivery vehicle. The Army will conduct a study determining the appropriate SFW to utilize against these targets and to develop and field this capability no later than FY 2030. The SFW will consist of a munition dispenser containing multiple submunitions. These submunitions will independently acquire, identify, and engage these targets.   |   | -  | -              | 30.158         |

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| <b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Army   |   | <b>Date:</b> March 2023                                  |                |                |
| <b>Appropriation/Budget Activity</b><br>2040 / 7   | <b>R-1 Program Element (Number/Name)</b><br>PE 0205778A / <i>Guided Multiple-Launch Rocket System (GMLRS)</i> | <b>Project (Number/Name)</b><br>EG3 / <i>Guided MLRS</i> |                |                |
| <b>B. Accomplishments/Planned Programs (\$ in Millions)</b>  |   | <b>FY 2022</b>   | <b>FY 2023</b> | <b>FY 2024</b> |
| <p>In order to support an accelerated demonstration schedule, initial efforts will be focused on demonstration of SFW on a standard range GMLRS. Characterization and testing of SFW in ERG environments will be incorporated to support subsequent demonstration of SFW on ER GMRLS.</p> <p><b>FY 2024 Plans:</b><br/>Award an Other Transactional Authority contract to support an initial system requirement review with the payload vendor and to develop the design leading up to Interim Design Review #1. This effort will also start procurement of GMLRS rockets, SFW payload munitions, and hardware for dispensing mechanisms needed to support integration and testing efforts starting in FY 2025. Additionally, FY 2024 also funds efforts to assess SFW qualification requirements to address safety and prepare for ground component level testing.</p> <p>Utilize Aviation and Missile Center to support system analysis and trade studies, software prototyping (rocket operational flight and launcher), and requirements development for payload and dispensing mechanism to support the payload vendor's effort to integrate the SFW payload into a GMLRS form-factor.</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b><br/>FY 2024 is the first year for Sensor Fuzed Weapon.</p> |   |  |                |                |
| <p><b>Title:</b> EAW Integration into ER GMLRS</p> <p><b>Description:</b> Integration of the Enhanced Alternative Warhead into the ER GMLRS will provide medium to light armor capability against targets at extended ranges.</p> <p><b>FY 2024 Plans:</b><br/>Begin acquisition of long lead hardware items to support test schedule, mechanical and electrical integration of EAW into ER GMLRS, and development of software.</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b><br/>FY 2024 is the initial year for integration of EAW into ER GMLRS.</p>  |   | -  | -              | 17.453         |
| <p><b>Title:</b> SBIR/STTR Transfer</p> <p><b>Description:</b> Funding transferred in accordance with Title 15 USC §638.</p> <p><b>FY 2023 Plans:</b><br/>Funding transferred in accordance with Title 15 USC §638.</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b></p>  |   | -  | 0.737          | -              |

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| <b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Army |   | <b>Date:</b> March 2023                                  |
| <b>Appropriation/Budget Activity</b><br>2040 / 7                   | <b>R-1 Program Element (Number/Name)</b><br>PE 0205778A / <i>Guided Multiple-Launch Rocket System (GMLRS)</i> | <b>Project (Number/Name)</b><br>EG3 / <i>Guided MLRS</i> |

|   |                |                |                |
|---|----------------|----------------|----------------|
| <b>B. Accomplishments/Planned Programs (\$ in Millions)</b> | <b>FY 2022</b> | <b>FY 2023</b> | <b>FY 2024</b> |
| Funding transferred in accordance with Title 15 USC §638.   |                |                |                |
| <b>Accomplishments/Planned Programs Subtotals</b>           | 35.307         | 20.180         | 50.688         |

**C. Other Program Funding Summary (\$ in Millions)**

| <b>Line Item</b>                            | <b>FY 2022</b> | <b>FY 2023</b> | <b>FY 2024<br/>Base</b> | <b>FY 2024<br/>OCO</b> | <b>FY 2024<br/>Total</b> | <b>FY 2025</b> | <b>FY 2026</b> | <b>FY 2027</b> | <b>FY 2028</b> | <b>Cost To<br/>Complete</b> | <b>Total Cost</b> |
|---|----------------|----------------|-------------------------|------------------------|--------------------------|----------------|----------------|----------------|----------------|-----------------------------|-------------------|
| • C64400: <i>Guided MLRS Rocket (GMLRS)</i> | 1,130.519      | 1,312.028      | 942.280                 | -                      | 942.280                  | 1,214.127      | 1,321.161      | 1,254.264      | 1,336.417      | Continuing                  | Continuing        |
| • EG2: <i>GMLRS Alternative Warheads</i>    | 23.209         | -              | 25.264                  | -                      | 25.264                   | -              | -              | -              | -              | 0.000                       | 48.473            |

**Remarks**

GMLRS Procurement funding includes C65404 and C65406.

**D. Acquisition Strategy**

Project EG3: Guided MLRS supports the development of materiel changes that improve the GMLRS family of munitions and address emerging requirements.

Supported efforts include:

- \* APNT activities to improve overall system performance in contested environments
- \* ER GMLRS is performed as an Engineering Change Proposal (ECP). This is being executed under a Firm Fixed Price contract which completes efforts through Critical Design Review (CDR), System Qualification Tests (SQT) and Operational Testing (OT).
- \* Leveraging the Enhanced Alternative Warhead capability by integrating it with the ER GMLRS rocket for improved effects at greater ranges.
- \* The Sensor Fuzed Weapon effort shall be performed under an Other Transactional Authority to be awarded in FY 2024 to determine the feasibility and effectiveness of utilizing GMLRS rockets to dispense anti-armor submunitions for engaging medium and heavy armor targets.

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army** **Date:** March 2023

|  |  |   |
|--|--|---|
| <b>Appropriation/Budget Activity</b><br>2040 / 7 | <b>R-1 Program Element (Number/Name)</b><br>PE 0205778A / Guided Multiple-Launch Rocket System (GMLRS) | <b>Project (Number/Name)</b><br>EG3 / Guided MLRS |
|--|--|---|

| <b>Management Services (\$ in Millions)</b> |                                   |   |                    | <b>FY 2022</b> |                   | <b>FY 2023</b> |                   | <b>FY 2024 Base</b> |                   | <b>FY 2024 OCO</b> |                   | <b>FY 2024 Total</b> | <b>Cost To Complete</b> | <b>Total Cost</b> | <b>Target Value of Contract</b> |
|---|-----------------------------------|---|--------------------|----------------|-------------------|----------------|-------------------|---------------------|-------------------|--------------------|-------------------|----------------------|-------------------------|-------------------|---------------------------------|
| <b>Cost Category Item</b>                   | <b>Contract Method &amp; Type</b> | <b>Performing Activity &amp; Location</b> | <b>Prior Years</b> | <b>Cost</b>    | <b>Award Date</b> | <b>Cost</b>    | <b>Award Date</b> | <b>Cost</b>         | <b>Award Date</b> | <b>Cost</b>        | <b>Award Date</b> | <b>Cost</b>          |                         |                   |                                 |
| Government Program Management               | Various                           | Various : RSA                             | 19.048             | 1.454          | Jan 2022          | 1.932          | Jan 2023          | 2.758               | Jan 2024          | -                  |                   | 2.758                | Continuing              | Continuing        | Continuing                      |
| SBIR/STTR Transfer                          | Various                           | Various : Various                         | -                  | -              |                   | 0.737          |                   | -                   |                   | -                  |                   | -                    | 0.000                   | 0.737             | -                               |
| <b>Subtotal</b>                             |                                   |   | 19.048             | 1.454          |                   | 2.669          |                   | 2.758               |                   | -                  |                   | 2.758                | Continuing              | Continuing        | N/A                             |

**Remarks**  
MIPR-Military Interdepartmental Purchase Request; RSA-Redstone Arsenal, Alabama; TBD-To Be Determined  
Note that in FY 2023, Project EG3: Guided MLRS funds all Government Program Management activities. In prior years, this was a shared cost between Projects EG2 and EG3. Total cost for this activity in FY 2023 decreases as compared to FY 2022.

| <b>Product Development (\$ in Millions)</b> |                                   |  |                    | <b>FY 2022</b> |                   | <b>FY 2023</b> |                   | <b>FY 2024 Base</b> |                   | <b>FY 2024 OCO</b> |                   | <b>FY 2024 Total</b> | <b>Cost To Complete</b> | <b>Total Cost</b> | <b>Target Value of Contract</b> |
|---|-----------------------------------|--|--------------------|----------------|-------------------|----------------|-------------------|---------------------|-------------------|--------------------|-------------------|----------------------|-------------------------|-------------------|---------------------------------|
| <b>Cost Category Item</b>                   | <b>Contract Method &amp; Type</b> | <b>Performing Activity &amp; Location</b>          | <b>Prior Years</b> | <b>Cost</b>    | <b>Award Date</b> | <b>Cost</b>    | <b>Award Date</b> | <b>Cost</b>         | <b>Award Date</b> | <b>Cost</b>        | <b>Award Date</b> | <b>Cost</b>          |                         |                   |                                 |
| Unitary Contracts/Multiple                  | SS/FPIF                           | LMMFC : Dallas, TX                                 | 66.350             | 1.037          | Jan 2022          | 0.996          | Jan 2022          | -                   |                   | -                  |                   | -                    | Continuing              | Continuing        | Continuing                      |
| GMLRS Extended Range                        | SS/FFP                            | LMMFC : Dallas, TX                                 | 194.957            | 0.941          |                   | -              |                   | -                   |                   | -                  |                   | -                    | Continuing              | Continuing        | Continuing                      |
| APNT Development                            | C/CPFF                            | Kord : Huntsville, AL                              | 13.980             | 7.551          | Jan 2022          | -              |                   | -                   |                   | -                  |                   | -                    | Continuing              | Continuing        | Continuing                      |
| Enhanced Alternative Warhead                | C/FPIF                            | Kord : Huntsville, AL                              | 24.964             | -              |                   | -              |                   | -                   |                   | -                  |                   | -                    | Continuing              | Continuing        | Continuing                      |
| Other Government Agencies                   | MIPR                              | Various : Various                                  | 20.185             | 17.548         | Dec 2021          | 8.552          | Dec 2022          | 10.500              | Jan 2024          | -                  |                   | 10.500               | 0.000                   | 56.785            | Continuing                      |
| Sensor Fuzed Weapon Competitive Contracts   | C/TBD                             | TBD : TBD  | -                  | -              |                   | -              |                   | 19.667              | Jan 2024          | -                  |                   | 19.667               | 0.000                   | 19.667            | Continuing                      |
| Next Generation M-Code Receiver             | C/CPFF                            | TBD : TBD  | -                  | -              |                   | -              |                   | 2.910               | Apr 2024          | -                  |                   | 2.910                | 0.000                   | 2.910             | Continuing                      |
| EAW Integration into ER GMLRS               | SS/CPFF                           | Lockheed Martin : Camden, AR and Grand Prairie, TX | -                  | -              |                   | -              |                   | 14.853              | Apr 2024          | -                  |                   | 14.853               | 0.000                   | 14.853            | Continuing                      |
| <b>Subtotal</b>                             |                                   |  | 320.436            | 27.077         |                   | 9.548          |                   | 47.930              |                   | -                  |                   | 47.930               | Continuing              | Continuing        | N/A                             |

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army** **Date:** March 2023

|  |  |   |
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| <b>Appropriation/Budget Activity</b><br>2040 / 7 | <b>R-1 Program Element (Number/Name)</b><br>PE 0205778A / Guided Multiple-Launch Rocket System (GMLRS) | <b>Project (Number/Name)</b><br>EG3 / Guided MLRS |
|--|--|---|

| Product Development (\$ in Millions) |                        |                                |             | FY 2022 |            | FY 2023 |            | FY 2024 Base |            | FY 2024 OCO |            | FY 2024 Total | Cost To Complete | Total Cost | Target Value of Contract |
|--------------------------------------|------------------------|--------------------------------|-------------|---------|------------|---------|------------|--------------|------------|-------------|------------|---------------|------------------|------------|--------------------------|
| Cost Category Item                   | Contract Method & Type | Performing Activity & Location | Prior Years | Cost    | Award Date | Cost    | Award Date | Cost         | Award Date | Cost        | Award Date | Cost          |                  |            |                          |

**Remarks**  
 SS/FPIF-Sole Source/Fixed-Price Incentive Firm; LMMFC - Lockheed Martin Missile and Fire Control; TX - Texas; C/CPFF- Competitive/Cost Plus Fixed Fee; C/FPIF - Competitive/Fixed-Price Incentive Firm; WV - West Virginia; VA - Virginia; TBD - To Be Determined.  
 OGA costs in FY 2022 include \$6.19 million in support of ER GMLRS and \$4.2 million in support of APNT.  
 OGA costs in FY 2023 include \$2.25 million in support of ER GMLRS.

| Test and Evaluation (\$ in Millions) |                        |                                |             | FY 2022 |            | FY 2023 |            | FY 2024 Base |            | FY 2024 OCO |            | FY 2024 Total | Cost To Complete | Total Cost | Target Value of Contract |
|--------------------------------------|------------------------|--------------------------------|-------------|---------|------------|---------|------------|--------------|------------|-------------|------------|---------------|------------------|------------|--------------------------|
| Cost Category Item                   | Contract Method & Type | Performing Activity & Location | Prior Years | Cost    | Award Date | Cost    | Award Date | Cost         | Award Date | Cost        | Award Date | Cost          |                  |            |                          |
| Test Support                         | MIPR                   | Various : Various              | 45.628      | 5.244   | Jan 2022   | 3.445   | Jan 2023   | -            |            | -           |            | -             | Continuing       | Continuing | Continuing               |
| Enhanced Alternative Warhead         | MIPR                   | Various : Various              | 0.075       | 1.532   |            | 4.518   |            | -            |            | -           |            | -             | 0.000            | 6.125      | -                        |
| <b>Subtotal</b>                      |                        |                                | 45.703      | 6.776   |            | 7.963   |            | -            |            | -           |            | -             | Continuing       | Continuing | N/A                      |

**Remarks**  
 Performing Activities include White Sands Missile Range (WSMR), Aviation and Missile Center (AvMC), Army Research Laboratory (ARL), and Redstone Test Center (RTC).

|                            | Prior Years | FY 2022 | FY 2023 | FY 2024 Base | FY 2024 OCO | FY 2024 Total | Cost To Complete | Total Cost | Target Value of Contract |
|----------------------------|-------------|---------|---------|--------------|-------------|---------------|------------------|------------|--------------------------|
| <b>Project Cost Totals</b> | 385.187     | 35.307  | 20.180  | 50.688       | -           | 50.688        | Continuing       | Continuing | N/A                      |

**Remarks**



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| <b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2024 Army</b> |  | <b>Date:</b> March 2023                           |
| <b>Appropriation/Budget Activity</b><br>2040 / 7             | <b>R-1 Program Element (Number/Name)</b><br>PE 0205778A / Guided Multiple-Launch Rocket System (GMLRS) | <b>Project (Number/Name)</b><br>EG3 / Guided MLRS |

| Event Name   | FY 2022 |   |   |   | FY 2023 |   |   |   | FY 2024 |   |   |   | FY 2025 |   |   |   | FY 2026 |   |   |   | FY 2027 |   |   |   | FY 2028 |   |   |   |
|--|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|
|  | 1       | 2 | 3 | 4 | 1       | 2 | 3 | 4 | 1       | 2 | 3 | 4 | 1       | 2 | 3 | 4 | 1       | 2 | 3 | 4 | 1       | 2 | 3 | 4 | 1       | 2 | 3 | 4 |
| SFW System Requirements Review                       |         |   |   |   |         |   |   |   | 3       |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| SFW Interim Design Review #1                         |         |   |   |   |         |   |   |   |         |   |   |   | 4       |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| SFW Component Testing                                |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| SFW Interim Design Review #2                         |         |   |   |   |         |   |   |   |         |   |   |   | 5       |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| SFW Demonstration                                    |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| <b>EAW Integration into ER GMLRS</b>                 |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| EAW Integration and Delta Qualification for ER GMLRS |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| Long Lead Hardware for Prototypes                    |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |

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| <b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2024 Army |   | <b>Date:</b> March 2023                                  |
| <b>Appropriation/Budget Activity</b><br>2040 / 7              | <b>R-1 Program Element (Number/Name)</b><br>PE 0205778A / <i>Guided Multiple-Launch Rocket System (GMLRS)</i> | <b>Project (Number/Name)</b><br>EG3 / <i>Guided MLRS</i> |

Schedule Details

| Events   | Start   |      | End     |      |
|--|---------|------|---------|------|
|  | Quarter | Year | Quarter | Year |
| Assured Position, Navigation, and Timing           | 3       | 2021 | 4       | 2033 |
| System Engineering                                 | 3       | 2021 | 2       | 2023 |
| Prototype Builds                                   | 4       | 2022 | 2       | 2023 |
| Next Generation Guidance Set Development           | 2       | 2024 | 4       | 2032 |
| ER GMLRS   | 2       | 2018 | 1       | 2024 |
| Extended Range GMLRS Development and Qualification | 2       | 2018 | 4       | 2023 |
| Preliminary Design Review                          | 3       | 2019 | 3       | 2019 |
| ER GMLRS Design Verification Testing               | 3       | 2020 | 2       | 2021 |
| ER GMLRS Engineering Development Testing           | 1       | 2021 | 3       | 2021 |
| Delta Preliminary Design Review                    | 1       | 2021 | 1       | 2021 |
| ER GMLRS System Qualification (Ground) Testing     | 3       | 2021 | 2       | 2023 |
| Critical Design Reviews                            | 3       | 2021 | 3       | 2021 |
| ER GMLRS System Qualification Flight Testing       | 3       | 2022 | 4       | 2023 |
| Engineering Change Proposal (ECP) Cut-in Decision  | 4       | 2023 | 4       | 2023 |
| ER GMLRS Operational Testing                       | 4       | 2023 | 4       | 2023 |
| ER GMLRS Functional Configuration Audit            | 4       | 2023 | 4       | 2023 |
| Sensor Fuzed Weapon                                | 2       | 2024 | 4       | 2030 |
| SFW Contract Vehicle                               | 2       | 2024 | 2       | 2028 |
| SFW System Requirements Review                     | 2       | 2024 | 2       | 2024 |
| SFW Interim Design Review #1                       | 1       | 2025 | 1       | 2025 |
| SFW Component Testing                              | 4       | 2025 | 4       | 2026 |
| SFW Interim Design Review #2                       | 4       | 2025 | 4       | 2025 |

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| <b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2024 Army |   | <b>Date:</b> March 2023                                  |
| <b>Appropriation/Budget Activity</b><br>2040 / 7              | <b>R-1 Program Element (Number/Name)</b><br>PE 0205778A / <i>Guided Multiple-Launch Rocket System (GMLRS)</i> | <b>Project (Number/Name)</b><br>EG3 / <i>Guided MLRS</i> |

| Events   | Start   |      | End     |      |
|--|---------|------|---------|------|
|  | Quarter | Year | Quarter | Year |
| SFW Demonstration                                    | 1       | 2027 | 2       | 2027 |
| EAW Integration into ER GMLRS                        | 2       | 2024 | 4       | 2029 |
| EAW Integration and Delta Qualification for ER GMLRS | 2       | 2024 | 4       | 2029 |
| Long Lead Hardware for Prototypes                    | 2       | 2024 | 3       | 2025 |