

2. Amendment/Modification No. CC	3. Effective Date 2004SEP21	4. Requisition/Purchase Req No. SEE SCHEDULE	5. Project No. (If applicable)
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6. Issued By TACOM WARREN SFAB-GCS-W-BCTP LESLIE LEWIS (586)753-2054 WARREN, MICHIGAN 48397-5000 HTTP://CONTRACTING.TACOM.ARMY.MIL EMAIL: LEWISL@TACOM.ARMY.MIL	Code	W56HZV	7. Administered By (If other than Item 6) DCMA DETROIT U.S. ARMY TANK & AUTOMOTIVE COMMAND (TACOM) ATTN: DCMAE-GJD WARREN, MI 48397-5000	Code	S2305A
			SCD C PAS NONE ADP PT HQ0337		

8. Name And Address Of Contractor (No., Street, City, County, State and Zip Code) GM GDLS DEFENSE GROUP LLC, JOINT VENTURE 38500 MOUND ROAD STERLING HEIGHTS, MI. 48310-3260 TYPE BUSINESS: Large Business Performing in U.S.	<input type="checkbox"/>	9A. Amendment Of Solicitation No.
	<input type="checkbox"/>	9B. Dated (See Item 11)
	<input checked="" type="checkbox"/>	10A. Modification Of Contract/Order No. DAAE07-00-D-M051/0001
Code INLE2	Facility Code	10B. Dated (See Item 13) 2000NOV16

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers is extended, is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendments; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. **FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.** If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. Accounting And Appropriation Data (If required)
ACRN: AV NET INCREASE: \$124,713.00

13. THIS ITEM ONLY APPLIES TO MODIFICATIONS OF CONTRACTS/ORDERS

It Modifies The Contract/Order No. As Described In Item 14.

<input checked="" type="checkbox"/>	A. This Change Order is Issued Pursuant To: FAR 52.243-2	The Changes Set Forth In Item 14 Are Made In
<input type="checkbox"/>	B. The Above Numbered Contract/Order Is Modified To Reflect The Administrative Changes (such as changes in paying office, appropriation data, etc.) Set Forth In Item 14, Pursuant To The Authority of FAR 43.103(b).	
<input type="checkbox"/>	C. This Supplemental Agreement Is Entered Into Pursuant To Authority Of:	
<input type="checkbox"/>	D. Other (Specify type of modification and authority)	

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the Issuing Office.

14. Description Of Amendment/Modification (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SEE SECOND PAGE FOR DESCRIPTION

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. Name And Title Of Signer (Type or print)	16A. Name And Title Of Contracting Officer (Type or print) OTTOMAN, EDWARD OTTOMANE@TACOM.ARMY.MIL (586)574-2147
15B. Contractor/Offeror (Signature of person authorized to sign)	15C. Date Signed
	16B. United States Of America By _____ /SIGNED/ (Signature of Contracting Officer)
	16C. Date Signed 2004SEP21

Name of Offeror or Contractor: GM GDLS DEFENSE GROUP LLC, JOINT VENTURE

SECTION A - SUPPLEMENTAL INFORMATION

STRYKER FAMILY OF VEHICLES - ENGINEERING, MANUFACTURING AND DEVELOPMENT (EMD)

1. The purpose of the Modification CC is to increase the level of effort (LOE) funding to permit the incorporation of Proof of Enablers (POE) capabilities to be built upon the FBCB2 6.4.4 platform. The Contractor shall modify SLDS software on the Video Display Terminal (VDT), prepare the necessary documentation, perform integration activities and provide vendor support. This effort was originally submitted under Work Directive 0012-068.

2. The Government hereby authorizes the Contractor to perform a maximum level of effort of 860 manhours for an estimated cost inclusive of fee of \$86,000.00. The Government also authorizes \$34,713.00 inclusive of fee for Other Direct Costs and \$4,000.00 (exclusive of fee) for travel.

3. The Contractor shall submit a cost report of the manhours and dollars expended for this effort in accordance with Contract Data Requirements List (CDRL) A062 entitled, "Level of Effort Cost Status Report". The cost report shall include monthly status of manhours and funds expended in Contractor format. The Contractor shall report costs associated with this effort as segregable and separate entries on the CDRL A062 submission.

4. The Contractor shall submit data in accordance with the following CDRLs which were previously incorporated by Modification BN to Delivery Order 0001 dated 23 Sep 03:

- (a) CDRL A078 entitled, "Requirements/Design Description (RDD) for Changes to Stryker System Design"
- (b) CDRL A079 entitled, "Phase I Test Plan"
- (c) CDRL A080 entitled, "Requirements/Design Description (RDD) for Changes to Stryker Software Interfaces in Support of POE"
- (d) CDRL A081 entitled, "Phase 1 Test Results/Report"
- (e) CDRL A082 entitled, "Phase 2 Test Plan"
- (f) CDRL A083 entitled, "Phase 2 Test Results/Report"
- (g) CDRL A084 entitled, "Phase 2 Revised ICD Inputs"
- (h) CDRL A085 entitled, "After Action Report"

5. The Contractor shall also submit data in accordance with CDRLs A077 entitled, "Phase I Revised ICD Inputs", A086 entitled "Interface Control Descriptions", A087 entitled "Interface Design Descriptions" and A155 entitled "POE Source Code and Documentation".

5. As a result of this modification:

- (a) CLINs 6000BQ, 6000BR, 6000BS and CDRL A155 are hereby added to the contract
- (b) the manhours and dollars (Cost Plus Fixed Fee) funded under CLIN 6000BQ are as follows:

	MANHOURS	TOTAL ESTIMATED COST	FIXED FEE	TOTAL ESTIMATED AMOUNT
This Modification	860	\$ 79,077.00	\$ 6,923.00	\$ 86,000.00
Total Labor and Dollars	860	\$ 79,077.00	\$ 6,923.00	\$ 86,000.00

- (c) the material/ODC costs (Cost Plus Fixed Fee) funded under CLIN 6000BR are as follows:

	TOTAL ESTIMATED COST	FIXED FEE	TOTAL ESTIMATED AMOUNT
This Modification	\$ 31,920.00	\$ 2,793.00	\$ 34,713.00
Total Material/ODCs	\$ 31,920.00	\$ 2,793.00	\$ 34,713.00

- (d) the travel costs (Cost - No Fee) funded under CLIN 6000BS are as follows:

	TOTAL ESTIMATED COST	FIXED FEE	TOTAL ESTIMATED AMOUNT
This Modification	\$ 4,000.00	\$ -0-	\$ 4,000.00
Total Travel	\$ 4,000.00	\$ -0-	\$ 4,000.00

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- 6. As a result of this modification, the total amount funded under Delivery Order 0012 is increased by \$124,713.00.
- 7. Except as specifically stated, all other terms and conditions of Delivery Order 0012 remain unchanged and in full force and effect.

*** END OF NARRATIVE A 142 ***

Name of Offeror or Contractor: GM GDLS DEFENSE GROUP LLC, JOINT VENTURE

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	<p>SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS</p> <p><u>SERVICES LINE ITEM</u></p> <p>NOUN: INTEG BCS3 SFTWR FBCB2-LABOR PRON: W14GX138X1 PRON AMD: 02 ACRN: AV AMS CD: 423829.00000</p> <p>VDT on FBCB2 on Proof of Enablers (POE)</p> <p>Level of Effort 860 manhours</p> <p>Estimated Cost: \$ 79,077.00 Fixed Fee \$ 6,923.00 Total Estimated Amount \$ 86,000.00</p> <p>(End of narrative B001)</p> <p><u>Inspection and Acceptance</u> INSPECTION: Origin ACCEPTANCE: Origin</p> <p><u>Deliveries or Performance</u> DLVR SCH PERF COMPL <u>REL CD</u> <u>QUANTITY</u> <u>DATE</u> 001 0 01-NOV-2004</p> <p style="text-align: right;">\$ 86,000.00</p>				<p>\$ 86,000.00</p>
6000BR	<p><u>SERVICES LINE ITEM</u></p> <p>NOUN: INTEG BCS3 SFTWR FBCB2 - ODC PRON: W14GX159X1 PRON AMD: 01 ACRN: AV AMS CD: 423829.00000</p> <p><u>Inspection and Acceptance</u> INSPECTION: Origin ACCEPTANCE: Origin</p> <p><u>Deliveries or Performance</u> DLVR SCH PERF COMPL <u>REL CD</u> <u>QUANTITY</u> <u>DATE</u> 001 0 01-NOV-2004</p> <p style="text-align: right;">\$ 34,713.00</p>				<p>\$ 34,713.00</p>

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT						
6000BS	<p><u>SERVICES LINE ITEM</u></p> <p>NOUN: INTEG BCS3 SFTWR FBCB2-TRAVEL PRON: W14GX158X1 PRON AMD: 01 ACRN: AV AMS CD: 423829.00000</p> <p>VDT on FBCB2 on Proof of Enablers (POE)</p> <p>Travel Costs</p> <p>Estimated Cost: \$ 4,000.00 Fixed Fee \$ 0.00 Total Estimated Amount \$ 4,000.00</p> <p>(End of narrative B001)</p> <p><u>Inspection and Acceptance</u> INSPECTION: Origin ACCEPTANCE: Origin</p> <p><u>Deliveries or Performance</u></p> <table data-bbox="261 1100 769 1178"> <tr> <td>DLVR SCH</td> <td>PERF COMPL</td> </tr> <tr> <td><u>REL CD</u></td> <td><u>QUANTITY</u> <u>DATE</u></td> </tr> <tr> <td>001</td> <td>0 01-NOV-2004</td> </tr> </table> <p style="text-align: right;">\$ 4,000.00</p>	DLVR SCH	PERF COMPL	<u>REL CD</u>	<u>QUANTITY</u> <u>DATE</u>	001	0 01-NOV-2004				\$ 4,000.00
DLVR SCH	PERF COMPL										
<u>REL CD</u>	<u>QUANTITY</u> <u>DATE</u>										
001	0 01-NOV-2004										

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SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

Scope of Work for Proof Of Enablers (POE)

The Proof Of Enablers (POE) is a technical test and demonstration involving the integration of a variety of Army enablers to prove out the concept of a self-diagnosing and self-reporting weapon system based on the integration of the weapons system health monitoring system, brigade and below command and control systems, and brigade and below logistics systems. The POE is targeting the Stryker, FMTV, HEMTT, HMWVW weapon systems, and FBCB2 and MTS communications capability. The POE test and demonstration shall use one Stryker, FMTV, HEMTT, and HMWVW. The contractor shall provide support for the Stryker weapon system as follows.

- 1) Contractor shall develop system design. At a minimum, documentation delivered shall include descriptions of the following:
- a) Identification of supporting hardware and software components.
 - b) Hi-level interface descriptions for electrical, software, and user interfaces.
 - c) Concept of execution.

Contractor will provide a system requirements and design review at their facility in Goleta, CA.

Deliverable documents shall be in hardcopy and in electronic format (MS Word).

Deliverable: Requirements/Design Description (RDD) using contractor format. (CDRL A078)

Schedule: Deliverable provided 60 days after POE Interface Control Work Group Meeting (ICWG) with all contractors.

- 2) Contractor shall design software interfaces. Support development of software interface control documents (ICDs) between Stryker BCT3 software, PMM prognostics, IETMS, TLDD, Logbook, and FBCB2. Interfaces will be designed to use IBMs WebSphere as a middleware communication service. IC will be established through Interface Control Work Groups (ICWGs). Contractor will support one meeting in Goleta and two at other facilities. Diagnostic coverage will only be provided for a sample of powertrain, chassis electronics faults. Deliverable documents shall be in hardcopy and in electronic format (MS Word).

Deliverables:

Interface Control Descriptions (ICDs) for all data produced by contractor-CTC applications (NOTE: Assume Software Integrator will maintain IC for all data passing through WebSphere middleware). (CDRL A086)

Interface Design Descriptions (IDDs) change descriptions for interfaces between applications that are responsibility of contractor-CTC. (CDRL A087)

Schedule: Deliverable provided 90 days after POE Interface Control Work Group Meeting (ICWG) with all contractors. (NOTE: Assume IBM will maintain ICD)

- 3) Contractor shall perform Phase 1 Detailed Design and Implementation: Design, implement, test and demonstrate (to the government at GDLS-Goleta) integration of BCT3 software with the following applications:

- Powertrain interfaces for diagnostics and prognostics,
- TLDD software for embedded IETMs,
- Minimal FBCB2 6.4.X integration for POE (excluding VDT view and interaction capability),
- Remote VDT capability via 802.11 wireless link to a remote display.

Phase 1 assumptions include:

- All GFE applications and directed middleware (i.e., WebSphere) must be capable of running on the Microsoft Windows NT 4.0 Embedded and Windows 2000 operating system, and support use of a network file system.
- GFE software will be provided by the POE Subcontractors. In lieu of formal release, engineering version will be supplied. GDLS will integrate, test and Demo with the software supplied by September 15, 2004.
- Contractor software will be delivered for demo 150 days after establishing ICDs.
- Contractor will provide required processors and cabling. Processors may consist of enhanced VDTs or an alternate design representative of a design that can be provided in time for BCT5.
- IBM will provide ICD.
- USG will supply Stryker vehicle upgraded with 3rd Brigade Embedded Training and Diagnostics Block Upgrade NLT May 31, 2004.
- Deliverable documents shall be in hardcopy and in electronic format (MS Word).

Deliverable:

- (1) Revised ICD inputs as required (in contractor defined format) (CDRL A077)
- (2) Test plan (CDRL A079)
- (3) Test results/report (CDRL A081)

Schedule:

Test plan 30 days prior to test.

Test results/report 30 days after test.

Demonstration 150 days after establishing ICDs.

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Revised ICD inputs 150 days after establishing ICDs.

4) Contractor shall perform Phase 2 Detailed Design and Implementation. Design, implement, test and demonstrate (to the government at GDLS-Goleta) the following capabilities:

- Monitoring of fuel
- Monitoring of ammunition
- PMM - prognostics based prognostics
- Integration of BCT 3 software with TLDD digital logbook.
- Reporting diagnostics, prognostics and logistics via FBCB2

Contractor will add required hardware modifications to GFE supplied BCT 3 vehicle demonstrator to support the identified capabilities. Deliverable documents shall be in hardcopy and in electronic format (MS Word).

Deliverables:

- (1) Revised ICD inputs as required (in contractor defined format) (CDRL A084)
- (2) Test plan (CDRL A082)
- (3) Test results/report (CDRL A083)

Schedule:

Test Plan 60 days prior to field test.

Test results/test report 30 days prior to field test.

Demonstration in Goleta on September 28, 2004

Revised ICD inputs 30 days prior to field test.

Support field test Demonstration at FT Hood or other location in October/November 2004. Assume demo will take place in a protected environment on vehicle.

Deliverables:

1. After Action Report (CDRL A085)
2. POE Source Code and associated documentation in accordance with CDRL A155.

Schedule: 45 days after demonstration

*** END OF NARRATIVE C 003 ***

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Name of Offeror or Contractor: GM GDLS DEFENSE GROUP LLC, JOINT VENTURE

SECTION G - CONTRACT ADMINISTRATION DATA

LINE	PRON/ AMS CD/ ITEM MIPR	ACRN	OBLG STAT/ JOB ORD NO		PRIOR AMOUNT		INCREASE/DECREASE AMOUNT		CUMULATIVE AMOUNT
6000BQ	W14GX138X1 423829.00000	AV	2 DLG4RA	\$	0.00	\$	86,000.00	\$	86,000.00
6000BR	W14GX159X1 423829.00000	AV	2 DLG4RA	\$	0.00	\$	34,713.00	\$	34,713.00
6000BS	W14GX158X1 423829.00000	AV	2 DLG4RA	\$	0.00	\$	4,000.00	\$	4,000.00
					NET CHANGE	\$	124,713.00		

SERVICE NAME	NET CHANGE BY ACRN	ACCOUNTING CLASSIFICATION	ACCOUNTING STATION	INCREASE/DECREASE AMOUNT
Army	AV	21 42020000042220104238290252B S23185	W56HZV	\$ 124,713.00
NET CHANGE				\$ 124,713.00

	PRIOR AMOUNT OF AWARD	INCREASE/DECREASE AMOUNT	CUMULATIVE OBLIG AMT
NET CHANGE FOR AWARD:	\$ 345,607,144.80	\$ 124,713.00	\$ 345,731,857.80

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SECTION J - LIST OF ATTACHMENTS

<u>List of Addenda</u>	<u>Title</u>	<u>Date</u>	<u>Number of Pages</u>	<u>Transmitted By</u>
Exhibit G	CDRL A077 - PHASE I REVISED ICD INPUTS, CDRL A086 - ICDS, CDRL A087 - IDDS, A155 - POE SOURCE CODE AND DOCUMENTATION	17-SEP-2004	001	DATA