

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE	PAGE OF PAGES 1 3
2. AMENDMENT/MODIFICATION NO. 0001	3. EFFECTIVE DATE 01/22/2015	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)	
6. ISSUED BY U.S. DOT/Volpe Center Office of Acquisitions 55 Broadway Cambridge, MA 02142-1001	CODE V220	7. ADMINISTERED BY (If other than Item 6) CODE		

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)		(X)	9A. AMENDMENT OF SOLICITATION NO. DTRT5715RSBIR1
		(X)	9B. DATED (SEE ITEM 11) 01/06/2015
			10A. MODIFICATION OF CONTRACT/ORDER NO.
			10B. DATED (SEE ITEM 13)
CODE	FACILITY CODE		

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 1 copies of the amendment; (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 your 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)

**13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS.
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
<input type="checkbox"/>	
<input type="checkbox"/>	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, 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.)

- The solicitation is amended as stated in the following. See Box 11 for further instructions above. Pages 46 and 64 are deleted and the enclosed pages are substituted into the solicitation in their place. The substituted pages provide a revised technical topic for the Federal Rail Administration, Topic #15.1- FR9, Titled: "Portable Rail Suspension Displacement Monitoring System."
- Participants submitting proposals for Topic #15.1- FR9 shall acknowledge this Amendment as indicated above, and include a signed copy of this form as page one of their Technical Proposal.

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)	
		Jeanne M. Rossetsky	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		(Signature of Contracting Officer)	

INSTRUCTIONS

Instructions for items other than those that are self-explanatory, are as follows:

- (a) Item 1 (Contract ID Code). Insert the contract type identification code that appears in the title block of the contract being modified.
- (b) Item 3 (Effective date).
- (1) For a solicitation amendment, change order, or administrative change, the effective date shall be the issue date of the amendment, change order, or administrative change.
 - (2) For a supplemental agreement, the effective date shall be the date agreed to by the contracting parties.
 - (3) For a modification issued as an initial or confirming notice of termination for the convenience of the Government, the effective date and the modification number of the confirming notice shall be the same as the effective date and modification number of the initial notice.
 - (4) For a modification converting a termination for default to a termination for the convenience of the Government, the effective date shall be the same as the effective date of the termination for default.
 - (5) For a modification confirming the contracting officer's determination of the amount due in settlement of a contract termination, the effective date shall be the same as the effective date of the initial decision.
- (c) Item 6 (Issued By). Insert the name and address of the issuing office. If applicable, insert the appropriate issuing office code in the code block.
- (d) Item 8 (Name and Address of Contractor). For modifications to a contract or order, enter the contractor's name, address, and code as shown in the original contract or order, unless changed by this or a previous modification.
- (e) Item 9 (Amendment of Solicitation No. - Dated), and 10 (Modification of Contract/Order No. - Dated). Check the appropriate box and in the corresponding blanks insert the number and date of the original solicitation, contract, or order.
- (f) Item 12 (Accounting and Appropriation Data). When appropriate, indicate the impact of the modification on each affected accounting classification by inserting one of the following entries.
- (1) Accounting classification
Net increase \$
 - (2) Accounting classification
Net decrease \$
- NOTE: If there are changes to multiple accounting classifications that cannot be placed in block 12, insert an asterisk and the words "See continuation sheet".
- (g) Item 13. Check the appropriate box to indicate the type of modification. Insert in the corresponding blank the authority under which the modification is issued. Check whether or not contractor must sign this document. (See FAR 43.103.)
- (h) Item 14 (Description of Amendment/Modification).
- (1) Organize amendments or modifications under the appropriate Uniform Contract Format (UCF) section headings from the applicable solicitation or contract. The UCF table of contents, however, shall not be set forth in this document
 - (2) Indicate the impact of the modification on the overall total contract price by inserting one of the following entries:
 - (i) Total contract price increased by \$
 - (ii) Total contract price decreased by \$
 - (iii) Total contract price unchanged.
 - (3) State reason for modification.
 - (4) When removing, reinstating, or adding funds, identify the contract items and accounting classifications.
 - (5) When the SF 30 is used to reflect a determination by the contracting officer of the amount due in settlement of a contract terminated for the convenience of the Government, the entry in Item 14 of the modification may be limited to --
 - (i) A reference to the letter determination; and
 - (ii) A statement of the net amount determined to be due in settlement of the contract.
 - (6) Include subject matter or short title of solicitation/contract where feasible.
- (i) Item 16B. The contracting officer's signature is not required on solicitation amendments. The contracting officer's signature is normally affixed last on supplemental agreements.

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U.S. DOT Operating Administration	Topic Number & Title	Maximum Number of Anticipated Awards	Estimated Award Amount Phase I*	Estimated Award Amount Phase II**
Federal Railroad Administration (FRA)	15.1-FR4: Smart Phone Application for Onboard Railroad Passenger Information System	1	\$150,000	TBD
	15.1-FR5: Browser Based Application for Locomotive Inspection Data Collection	1	\$150,000	TBD
	15.1-FR6: Locomotive Flashing Light for Trespassers and Pedestrians Warning	2	\$150,000	\$1,000,000
	15.1-FR7: Long Range ROW Detection and Warning System	3	\$150,000	\$1,000,000
	15.1-FR8: Passive Rail Temperature Control Technology	1	\$150,000	TBD
	15.1-FR9: Portable Rail Suspension Displacement Monitoring Sensor	2	\$150,000	\$300,000
	15.1-FT1: Innovative Transit Technology Devices, Applications, or Solutions Focused on Safety, Mobility, or Energy and Sustainability	3	\$150,000	\$750,000
National Highway Traffic Safety Administration (NHTSA)	15.1-NH1: Improving the Ventilation of Motorcycle Helmets	2	\$100,000	\$300,000
<p>* Proposals that exceed the Phase I Estimated Award Amount will not be considered for award. **The Phase II funding level noted above is an estimate only, is subject to the availability of funds and/or the technical requirements to accelerate the development of a commercial product and/or innovation. Any changes to the Phase II estimated funding level listed above will be communicated to the small business after the completion of the Phase I project.</p>				

15.1-FR9: Portable Rail Suspension Displacement Monitoring Sensor

Monitoring rail car suspension deflection is important for a number of reasons including model validation, qualification testing, and to ensure that suspension systems are maintained in fit for service condition and operate as intended. It can be accomplished using one of many different sensors technologies from which to choose including linear potentiometers, non-contact sensors, and linear variable differential transformer (LVDT) position sensors. Historically, installation and use of such instrumentation was expensive and cumbersome. Advances in electronics and data acquisition systems have made such instrumentation cheaper, portable, and easier to use. The FRA seeks to develop a portable sensor for monitoring deflection of rail car suspensions. It is highly desirable that the sensor is designed using wireless technology and such that it can be integrated into existing portable systems currently being used by FRA and its inspectors for monitoring suspension performance and track conditions (in particular accelerometer based ride quality systems).

Expected Phase I Outcomes:

The outcome of Phase I should include a proof-of-concept paper and a prototype. A wired design is acceptable for Phase I. The sensor should measure spring displacement at 1/16 inch resolution and a minimum sample rate of 300 samples/per second. The sensor should be compatible with Windows 7 environment and should have an Application Programming Interface (API) that can be used to integrate it to other FRA software applications.

Expected Phase II Outcomes:

In this phase, a wireless system should be integrated into existing portable systems currently being used by FRA for monitoring suspension performance (in particular accelerometer based ride quality systems).