

Sole Source Justification Form

Bulletin Reference Number
Requesting Agency/University

Sole Source Justification Form - Part I

Section I - General Information

Department/Bureau/Section:

Need Identified Date: Supply/Service Need By Date:

Project Title:

Vendor:

Provide a description of the supplies or services required:

Value: Value of Initial Term, this Change Order or Amendment:

Will this Sole Source amend a Professional or Artistic Services contract? Yes No

*Sole Source may not be used for amendments for Professional or Artistic Services if the amendment would increase the value by more than 5% of the initial award or extend the term by more than 60 days.

Type:

Section II - Proposed Term

One-Time Purchase Term Contract

Section III - Funding Source

Select the type of funding to be used (Check all that apply): State Appropriate Funds Federal Funds Other (Explain):

Section IV - Sole Source Justification

This purchase is economically only available from a single source **primarily** because it is:

Are there secondary justification(s) for this sole source? Yes No

Another justification that this purchase is only available from a sole source is because it is:

Another justification that this purchase is only available from a sole source is because it is:

Section V - Purchase History

Has the Agency or University Purchased these supplies or services in the past? Yes No

Section VI - Business Rationale

Sole Source Justification Form

Bulletin Reference Number

2021-07

Requesting Agency/University

Illinois Department of Transportation

1. Provide a detailed explanation of the need for the supplies or services:

The location or presence of a train is detected by shorting (also called ("shunting") of low-voltage track circuits. The shunt is created when the electrical path between one rail and the other is bridged by one or more wheel sets of passing train. This happens when both wayside signals and those at a grade crossing. Preliminary data has shown that because of the light weight and the smaller number of cars in a train, passenger rail does not reliably shunt the circuit needed to deploy the crossing gates or signals. Problems with the reliable grade crossing signal shunting have become more apparent on implementation of Positive Train control ("PTC") on rail lines throughout the U.U. The track circuit assistor (TCA) is the only identified product (as noted by research from Canadian National and the Federal Railroad Administration) that has been demonstrated to enhance shunting of grade crossing signals in applications to Diesel Multiple-Unit cars operating in Australia, Ireland, and the United Kingdom. The need to enhance grade crossing signal shunting is a public safety issue, that has the potential to affect passenger rail operations throughout the United States. The TCA will provide a proven method to test on the Charger locomotive. If the TCA testing proves effective, IDOT will then move forward with additional testing of a custom fitted shunting enhancer for further testing and evaluation. IDOT has taken an active and leading role in addressing this concern and the planned procurement/shunt enhancing test program will put IDOT and the ICC at the forefront t of working to resolve this issue.

2. Provide a list and describe in detail the specifications required to satisfy the need:

This Westcode (Unipart) provisions will include a TAC system using a pre-existing antenna that will provide 165 kHz output that will be representative of a TCA system for the purpose of signaling equipment interference testing on a test track. The Vendor will also provide a design proposal for a mounting frame for the TCA antenna and the Tuner unit that can be adapted and manufactured by the participating host railroad, Canadian National, for use on the test track for signaling equipment interference testing. Based on the results of the testing, IDOT may persue procurement of another prototype custom antenna for the Charger locomotive from the Vendor.

3. Provide detail explaining the justification selected in Section IV to explain why the requested supplies or services are the only ones available that can satisfy the agency or university requirements?

The Westcode/Unipart Rail TAC is a copyrighted/patented design that is protected under Intellectual Property Rights and is the only product on the market that is anticipated to provide the required shunt enhancement. The Canadian National and the Federal Railroad Administration both conducted worldwide product and approach reviews to discover any and all possible products that might provide the enhanced shunting. These efforts extended for more than a year and the Westcode/Unipart Rail product was the only one that was found that had the required demonstrated successful performance in a railroad environment that could effectively enhance the shunting of the grade crossing signal required for continued , safe operation.

4. What are the unique features of the supplies or services that are not available in any other product or by any other vendor? Provide specific quantifiable factors/qualifications:

The railroad environment requires that products be both robust and when safety issues are involved (as in the case with reliable shunting of grade crossing signals), this makes the requirements on a vendor's product particularly daunting. The extensive product search conducted by both the Canadian National and the Federal Railroad Administration revealed that only the Westcode (Unipart Rail) TCA and shunt enhancer products would meet these stringent requirements. Unipart Rail's product also had a demonstrated, successful performance record on passenger rail train in Australia, Ireland, and the United Kingdom. This track record makes all the stakeholders hopeful that the product will produce similar results in the North American rail market, but the only way to establish this is to conduct a rigorous testing program on the IDOT-owned Charger locomotives.

5. Has the Agency or University considered alternative supplies or services to satisfy their need? Yes No

Sole Source Justification Form

Bulletin Reference Number

2021-07

Requesting Agency/University

Illinois Department of Transportation

5a. If yes, name the alternative vendors whose supplies or services were evaluated:

As noted in the previous sections of this form, no other products were found suitable for this market/available following search of possible, suitable products for application in the railroad environment.

5b. If yes, what were the alternatives for each vendor and why were they unacceptable? Be specific with regard to features, characteristics, requirements, capabilities and compatibility:

The railroad environment is a particularly demanding one and when a safety issue is involved, as is the case with providing reliable shunting of grade crossing signals, the requirements for a product to be both robust and flexible are particularly daunting. The Westcode (Unipart Rail) products were the only ones found to meet the demanding requirements.

5c. Explain how the market evaluation was conducted?

**This evaluation is to determine available options within a market. If the evaluation is to determine quality or best suited option, this is not the appropriate source selection. Under no circumstances shall the evaluation consist of testing alternative options. These activities must be conducted in a competitive transparent environment (i.e. IFB or RFP).*

The world wide market research was conducted by the Canadian National and the Federal Railroad Administration. IDOT and the ICC are in a position to take advantage of this extensive research by others and to implement the proposed solution to this potentially significant safety issues.

6. Are there resellers or distributors?

Yes No N/A

7. What efforts were made to get the best possible price (i.e. did the agency/university negotiate) and how did you determine the price for this purchase is considered fair and reasonable?

There is no other product available on the worldwide market that has demonstrated successful performance in the railroad environment and offers the required reliability of grade crossing signal shunt enhancing, so opportunities for negotiation is a better price or more favorable terms are limited.

8. Will this purchase obligate the State to this vendor for future purchases such as maintenance, licensing or continuing need?

Yes No

8a. If yes, please provide details regarding future obligations and/or needs:

If the first part of the purchase for the TCA testing goes well, IDOT may wish to pursue additional testing with a custom made shunt enhancer. The provider being the same Vendor given the various reasons above. This would only be as a result of the initial static testing with the TCA unit and data review.

9. What will be the financial or other impact to the State if this sole source is not approved and a competitive bid is required?

Significant delay in implementing the initial testing of the TCA may result in continued exposure of rail passengers, crews, motorists and pedestrians to potential grade crossing accidents due to poor or non-continuous shunting on grade crossing signals. The potential for continued exposure or accidents is a major concern to IDOT, the ICC, the FRA, Amtrak and other host rail carriers.

10. Is there any additional information you would like to add to justify this sole source?

The risk of not finding a solution to the signal problem could lead to a serious rail incident that may jeopardize lives. By implementing the first set of testing with the per-existing design of the TCA, IDOT and the ICC will be at the forefront of the industry's efforts to solve this significant operating and safety concern. Further analysis of test results may determine that a future custom-made shunt enhancer may be needed for further testing.

Sole Source Justification Form

Bulletin Reference Number

2021-07

Requesting Agency/University

Illinois Department of Transportation

Section VII

Requesting Department Signature Required

I know and understand the contents of this Sole Source Justification and attest that all statements are true and correct and the fairness and reasonableness of the price was adequately confirmed.

Requesting Department Representative

Jennifer Bastian

Digitally signed by Jennifer Bastian
Date: 2021.04.23 12:50:23 -05'00'

Phone Number

312-793-4803

Date

Apr 23, 2021

Printed Name

Jennifer Bastian

E-mail Address

Jennifer.bastian@illinois.gov

State Agency Bureau/Division Head or University Purchasing Director Approval and Signature Required

I know and understand the contents of this Sole Source Justification and attest that all statements are true and correct and the fairness and reasonableness of the price was adequately confirmed. (All prior form fields will lock once this e-signature is completed)

Agency Bureau/Division Head or University
Purchasing Director and Not a Designee

John Oimoen

Digitally signed by John
Oimoen
Date: 2021.04.26 11:29:43
-05'00'

Phone Number

312-793-4222

Date

4/26/2021

Printed Name

John Oimoen

E-mail Address

John.Oimoen@illinois.gov

SPO Approval and Signature Required

I have reviewed and understand the contents of this Sole Source Justification and agree with the State Agency or University determination.

I have reviewed and understand the contents of this Sole Source Justification and do not agree with the State Agency or University determination. As a result, the State Agency or University must explore other sourcing methods to satisfy their need.

State Purchasing Officer Signature

Colleen Caton

Phone Number

217/558-5432

Date

4/27/2021

Printed Name

Colleen Caton

E-mail Address

colleen.caton@illinos.gov