THE METROPOLITAN TRANSPORTATION AUTHORITY ACTING BY MTA CONSTRUCTION AND DEVELOPMENT



RFI-0000391845

Request for Information for

Simplification of the Auxiliary Wayside System ("AWS") and Work Train Modifications for Operation in the CBTC Territory



April 7, 2022

Subject: RFI-0000391845 - Simplification of the Auxiliary Wayside System ("AWS") and Work Train Modifications for Operation in the CBTC Territory

Dear Interested Parties:

The MTA Construction and Development Company ("MTA C&D") is seeking information from contractors, manufacturers and vendors in the Railway and Technology industries for innovative technology solutions that would allow MTA Work Trains to safely and efficiently operate on NYCT subway lines equipped with wayside Communication Based Train Control ("CBTC") equipment (the "CBTC Territory").

I am MTA C&D's designated Point of Contact for this RFI and I can be reached at <u>fabrizio.raho@mtacd.org</u>. All communications related to this RFI, including Respondent's RFI response should be directed to me. Responses should be submitted by May 16, 2022.

Thank you for your participation.

Sincerely,

Fabrizio Raho

Fabrizio Raho Contracts Supervisor

1 INTRODUCTION

The Metropolitan Transportation Authority ("MTA") operates various Work Trains throughout the New York City Transit subway system (the "system"). Many NYCT subway lines are already equipped with wayside CBTC equipment and MTA C&D is aggressively trying to deploy wayside CBTC equipment throughout the system. The Work Trains, which are not equipped with CBTC carborne equipment, are tracked by the CBTC system within the CBTC Territory through the Auxiliary Wayside System ("AWS") secondary detection system (axle counters or track circuits). Within the CBTC territory, Work Train movement is governed by AWS signals enforced by trip-stops, speed signs, and NYCT operating rules. The purpose of this RFI is obtain a cost-effective engineering solution to deliver more efficient movement of the Work Trains within the CBTC Territory by eliminating (or reducing) existing AWS trip-stops and other conventional signaling infrastructure.

This RFI is issued exclusively to elicit information. It is not a Request for Proposal ("RFP") or any promise that an RFP will be issued to a Respondent in the future. This RFI does not commit MTA C&D to contract for any material or services and MTA C&D will not pay for any information or any costs incurred in responding to this RFI. MTA C&D shall have the right to use any information submitted in response to this RFI without obligation or compensation.

2 INFORMATION SOLICITED FOR WORK TRAIN MODIFICATION

Please provide an answer to the following questions:

- 1. What Work Train modification and/or possible system modifications would you propose to:
 - a. ensure that Work Trains stop at Restrictive AWS Signals without reliance on trip stops, thereby eliminating (or reducing) the need for trip stops to enforce the signals for the Work Trains; and
 - b. reduce the number of conventional signals necessary to secure the operation of Work Trains within the CBTC Territory?

For each proposed solution please provide:

- 1. An overview of the solution;
- 2. A description of the impacts on the CBTC system, if any, including outlining any associated work or modifications necessary to implement the solution;
- 3. A description of any equipment that would need to be installed on the Work Train with an analysis of feasibility of implementation;
- 4. A high-level safety analysis demonstrating that the existing level of safety will be maintained or improved; and
- 5. Additional benefits to the proposed solution (in addition to the safe and efficient Work Train movement in the CBTC Territory), if any.

3 GUIDANCE IN PREPARATION OF THE RFI

- 1. The objective of this initiative is to reduce overall project durations and life cycle costs by reducing existing AWS equipment while maintaining the current level of safety.
- 2. It should be assumed that all Revenue Trains are CBTC equipped. Therefore, no solution regarding non-equipped Revenue Trains or Revenue Trains in by-pass mode should be offered as part of this exercise. (The governing of any unequipped trains or trains operating in bypass mode by operating rules, can be assumed for this exercise).
- 3. Additional benefits within the scope of the primary solution proposed could include:
 - a. Preventing Work Trains from exceeding safe speeds in areas where the civil speed is less than the Work Train maximum operating speed.
 - b. Allowing Work Trains to follow equipped trains safely between AWS Signals providing a reduced impact on headway when Work Trains are operated.
- 4. All response must clearly identify any portion of a proposed solution that the Respondent asserts is confidential and/or proprietary.

4 CONFIDENTIAL INFORMATION SHARED BY MTA C&D AS PART OF THIS RFI

1. To aid development of a response, any interested Respondent must obtain and review NYCT's Study to Equip Work Trains with CBTC produced in 2018. That document is Confidential Information as that term is defined in the attached Non-Disclosure and Confidentiality Agreement and can only be obtained following the execution by the Respondent of the NDA. Therefore, all interested Respondents must execute and return an electronic copy of the NDA attached to this RFI to MTA C&D's Point of Contact. Upon return of the executed NDA, MTA C&D's designated Point of Contact will send the Respondent an electronic copy of the document.