

**Board Report**

---

**File #:** 2017-0584, **File Type:** Contract**Agenda Number:** 25.

---

**SYSTEM SAFETY, SECURITY AND OPERATIONS COMMITTEE  
OCTOBER 19, 2017****SUBJECT: OPTION TO OVERHAUL 36 HEAVY RAIL VEHICLES****ACTION: EXERCISE THE OPTION TO OVERHAUL THE REMAINING 36 NEWEST HEAVY RAIL VEHICLES****RECOMMENDATION**

AUTHORIZE the Chief Executive Officer to:

- A. EXERCISE Option A to overhaul the remaining 36 of the 74 newest Heavy Rail Vehicles under Contract No. A650-2015, Heavy Rail Vehicle Overhaul and Critical Component Replacement Program (OCCRP) ("A650 Overhaul Program"), to Talgo Inc." in the not-to-exceed amount of \$18,271,818 for a total contract value of \$72,970,494, and to extend the period of performance for 10 months beyond the Base Order;
- B. NEGOTIATE AND EXECUTE with Talgo, Inc. for future contract modifications to Contract No. A650-2015 for a not to exceed amount of \$1,000,000 for each contract modification; and
- C. EXERCISE the option for the consultant Technical and Program Management Support Services under RFP No. A650-2015 Heavy Rail Vehicle Overhaul and Critical Component Replacement Program (OCCRP), Contract No. OP30433488, to LTK Engineering Services, in the not-to exceed amount of \$597,238 for a total contract value of \$4,494,837, and to extend the period of performance for an 10 additional months beyond the Base Order.

**ISSUE**

The seventy-four newest A650 vehicles are experiencing reduced reliability and service availability due to parts obsolescence issues, lack of vendor support and outdated technology. In October 2016 the Metro Board awarded Contract No. A650-2015 to Talgo Inc. to overhaul and replace critical components on 38 of Metro's 74 newest A650 HRVs in order to maintain a State of Good Repair. The contract includes an option to overhaul the remaining 36 HRV's.

Approval of Recommendations A and C allows the exercise of the Contract Option and permits the remaining 36 newest A650 HRV's to be overhauled. This ensures a consistent fleet configuration and ensures the fleet is maintained in a State of Good Repair.

Recommendation B will allow Metro and the Contractor to negotiate future change orders in a timely

---

manner to ensure that the maximum cost and schedule benefits can be realized. The A650-2105 delivery schedule for the base and option buy is very aggressive. This added delegation of authority will allow staff to mitigate impacts to the program schedule that may arise from change orders currently contemplated. The request for an increase in CMA from \$500,000 to \$1,000,000 for individual changes is consistent with Board authorized CMA's for other Rolling Stock programs, such as Contracts P3010 and P2550, Light Rail Vehicles, and the 45-foot CNG Composite Buses under Contract OP33202082. Staff does not seek any changes to the CMA for aggregate changes, which is 10% of the total Contract value.

## **DISCUSSION**

The primary objective of the project is to deliver safe, reliable, high quality, overhauled HRV's on-time and within budget, and to create new jobs for Los Angeles County that can be tied directly to the Overhaul Program. The exercise of the Option for the remaining 36 vehicles within a 12 month period of the original contract award saves Metro all escalation costs for the Option vehicles. One year of escalation, at a 2% rate of annual inflation, amounts to a \$365,000 savings to Metro.

Metro operates the Metro Red Line (MRL) with a fleet of 104 Vehicles, consisting of the original 30 (DC propulsion) HRV's and newest 74 (AC propulsion) HRV's manufactured by Breda Costruzioni-Ferrovie between 1992 and 2000. The original 30 HRVs have an average age of 24.5 years and average mileage of 790,000 miles per vehicle. The 74 newest HRVs have an average age of 18.6 years with average mileage greater than 1.3 million miles per vehicle.

The newest fleet is the heaviest used fleet on Metro's Red and Purple Lines. Many of the HRV's critical systems and components; specifically the propulsion, friction brake, signaling, communication, and trainline systems and components, suffer from parts obsolescence, lack of vendor support and outdated technology. These deficiencies diminish the performance and maintainability of the fleet. By overhauling and replacing these vital systems and components this Project will ensure the continued safety, reliability, availability, and maintainability of the fleet for full revenue service and maintain the fleet's State of Good Repair.

Further, performing the overhaul program is in accordance with Metro's Rail Fleet Management Plan FY2015 - FY2040 (Draft, September 13, 2016). The plan anticipates a need to expand each rail fleet to accommodate anticipated growth in ridership, line extensions and to replace vehicles reaching the end of their useful revenue service life. The overhaul program will also support the Maintenance department with revenue ready vehicles and reasonable spare ratios.

To support the project, the Consultant shall provide Metro with expert professional engineering, technical, and program management oversight services as directed and required by Metro's Project Manager and Rail Vehicle Acquisition staff to ensure the Vehicle Contractor's performance is consistent with the delivery requirements of the OCCRP Contract. Subject to Metro's direction, the Consultant shall apply appropriate technical and engineering support services and resources to ensure the timely overhaul and delivery of the overhauled Vehicles and associated deliverables.

The Scope of Services include, but are not limited to, document control, review and preparation of correspondence in response to technical submissions, oversight of the Vehicle Contractor's supply chain process, support of Project Reviews, oversight of testing and inspection activities, and other

technical support services as directed by Metro.

The Consultant shall provide, on an as needed basis, highly experienced and qualified passenger heavy rail transit engineers with demonstrated expertise in all subject areas listed in the Statement of Qualifications for the duration of the Contract.

The Diversity and Economic Opportunity Department (DEOD) did not recommend a Disadvantaged Business Enterprise (DBE) goal for this procurement as it is not applicable. This procurement falls under the Federal Transit Administration's (FTA) Transit Vehicle Manufacturer (TVM) goal in accordance with 49 Code of Federal Regulations (CFR) Part 26.49. However, Talgo Inc. has established a 6.51% DBE goal under the FTA TVM goal.

The Diversity and Economic Opportunity Department (DEOD) completed its initial evaluation of the Proposer's commitment to meet the twenty percent (20%) Race Conscious Disadvantage Business Enterprise (RC DBE) goal established for this project. LTK Engineering Services exceeded the goal by making a 30.74% DBE commitment and is deemed responsive to the DBE requirements.

### **DETERMINATION OF SAFETY IMPACT**

The execution of the Contractor and Consultant Options, Recommendations A and B, respectively, will have a direct and positive impact to system safety, service quality, system reliability, maintainability and overall customer satisfaction. The A650 Overhaul Program will permit Metro to maintain the State of Good Repair on the A650 newest fleet.

### **FINANCIAL IMPACT**

The approved Project LOP includes funds for the HRV Overhauls; \$72,970,493. There are also funds allocated for Professional Services, Metro Labor, and Project Contingency. The Base Order Contract value for the 38 HRV's is \$54,698,676 while the Option Contract value for the remaining 36 HRV's is \$18,271,817. The Base Order overhaul program is currently scheduled to be completed in FY21. The \$18,271,817 needed for the balance of 36 HRV's, as well for professional services, Metro labor and project contingency will be budgeted upon reassessment of project cash flows and programming of additional funds. These resources will be programmed during Metro's annual budget process.

Project funding of \$9,920,833 is included in the FY18 budget in Cost Center 3043 - Rail Vehicle Acquisition CP206038, Heavy Rail Vehicle Midlife Overhaul.

Since this is a multi-year contract, the cost center Manager, Project Manager, and Senior Executive Officer, Vehicle Acquisition will be responsible for ensuring that Project costs are budgeted in future fiscal years.

#### **Impact to Budget**

The source of funds for this procurement will come from Federal, State and local funding sources that are eligible for Rail Capital Projects. These funding sources will maximize fund use given funding eligibility provisions.

### **ALTERNATIVES CONSIDERED**

The Board may choose not to exercise these Options. However, this alternative is not recommended as it adds unnecessary escalation costs that are avoidable should Metro choose to move forward with the exercise of the Options at this time. Additionally, Metro Operations may end up with three (3) types of A650 HRV fleet, severely restricting the ability by Maintenance and Operation's to make-up trains to support revenue service: Original fleet, newest fleet that is overhauled and newest fleet that is not overhauled.

### **NEXT STEPS**

Upon Board approval, the Options will be exercised with Talgo, Inc. and LTK Engineering Services.

### **ATTACHMENTS**

Attachment A-1 and A-2 - Procurement Summary

Attachment B - Funding and Expenditure Plan

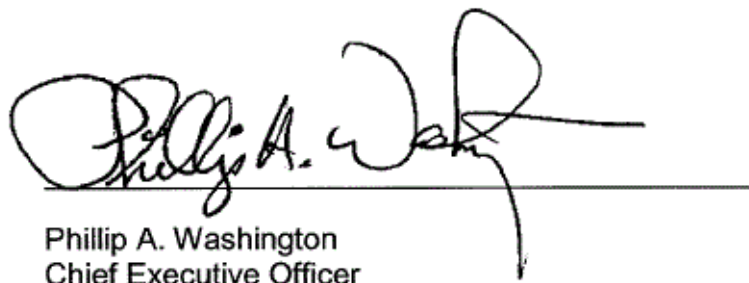
Attachment C-1 and C-2 - DEOD Summary

Prepared by: Andrew Kimani, Senior Project Control Manager, (213) 922-3221

Jesus Montes, Sr. Executive Officer, Vehicle Acquisition, (213) 418-3277

Reviewed by: James T. Gallagher, Chief Operations Officer, (213) 418-3108

Debra Avila, Chief Vendor/Contract Management Officer, (213) 418-3051



Phillip A. Washington  
Chief Executive Officer