

THIS PRINT COVERS CALENDAR ITEM NO.:

**SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY**

DIVISION: Finance and Information Technology

BRIEF DESCRIPTION:

Authorizing the Director of Transportation to execute Contract No. SFMTA-2020-20, Advanced Train Control System Equipment, Software and Professional Services Task Order Agreement, with Thales Transport & Security, Inc., for the Advanced Train Control System, in an amount not to exceed \$30,000,000 and an initial term of seven years with an option to extend the term for an additional two years; and urging the Board of Supervisors to approve the contract.

SUMMARY:

- In 1992, SFMTA awarded Contract No. MR-1034R to Alcatel Transport Automation (U.S.), Inc., now Thales Transport & Security (Thales), to design and install a communications-based Automatic Train Control System (ATCS), which went into revenue service in 1998.
- Contract No. 2020-20 is a new agreement providing proprietary equipment and services for the ATCS, in an amount not to exceed \$30,000,000 and an initial term of seven years with an option to extend two years. Work will be contracted on a task-order basis, as each task's scope is defined and funding is identified independently.
- This agreement establishes the terms and conditions and labor rates for the work; the price, milestone dates, and scope of services will be negotiated in the individual task orders. Procured tasks to follow normal contract approval thresholds.
- On May 15, 2020, the Director of Transportation authorized sole source negotiations with Thales, the only vendor able to supply the proprietary services, software and equipment for the ATCS.
- This task order agreement is subject to approval by the San Francisco Board of Supervisors under Charter Section 9.118, as the contract expenditures are anticipated to exceed \$10,000,000.

ENCLOSURES:

1. SFMTAB Resolution
2. SFMTA Contract No. SFMTA-2020-20-FTA

APPROVALS:

DATE

DIRECTOR _____

SECRETARY _____

ASSIGNED SFMTAB CALENDAR DATE: September 15, 2020

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PURPOSE

Authorizing the Director of Transportation to execute Contract No. SFMTA-2020-20, Advanced Train Control System Equipment, Software and Professional Services Task Order Agreement, with Thales Transport & Security, Inc., for the Advanced Train Control System, in an amount not to exceed \$30,000,000 and an initial term of seven years with an option to extend the term for an additional two years.

STRATEGIC PLAN GOALS AND TRANSIT FIRST POLICY PRINCIPLES

Strategic Goal 1: Create a safer transportation experience for everyone

Objective 1.2: Improve the safety of the transit system.

Strategic Goal 2: Make transit and other sustainable modes of transportation the most attractive and preferred means of travel

Objective 2.1: Improve transit service.

Objective 2.2: Enhance and expand use of the city's sustainable modes of transportation.

Transit First Policy 1: To ensure quality of life and economic health in San Francisco, the primary objective of the transportation system must be the safe and efficient movement of people and goods.

Transit First Policy 2: Public transit, including taxis and vanpools, is an economically and environmentally sound alternative to transportation by individual automobiles. Within San Francisco, travel by public transit, by bicycle and on foot must be an attractive alternative to travel by private automobile.

DESCRIPTION

In August 1992, the City, through its Public Utilities Commission, awarded Contract No. MR-1034R with Alcatel (now Thales Transport and Security), to provide a communications-based Advanced Train Control System (ATCS) to the Municipal Railway. The ATCS has been in revenue service since 1998.

The ATCS controls light rail vehicles operating in the Metro subway. It enhances light rail system performance and safety by controlling train speed, braking, routing and headways (the time between trains) more efficiently and accurately than can be accomplished by manual operator control. The ATCS also transmits train status information to passengers through the SFMTA's subway station sign and public address systems, and provides real-time train location data to the NextMuni arrival prediction system for trains in the subway and outside the range of Global Positioning Satellite (GPS) vehicle tracking devices.

The ATCS has 30-year design life, and will be in service through at least 2028, and potentially longer. This life cycle is consistent with other train-control systems worldwide. If the SFMTA

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appropriately maintains and upgrades the ATCS, it should meet the SFMTA's operational requirements for the next eight years.

The ATCS software and equipment are proprietary to Thales, so any required system updates and development of additional ATCS features and functions, and integration with new planned systems can only be obtained from Thales. It is necessary to periodically upgrade ATCS hardware and software to maintain the ATCS, to implement new and improved safety and operational functions, and to adapt the ATCS to changes in the SFMTA's rail operations.

Under the proposed Contract, the SFMTA would issue task orders to procure proprietary ATCS software, equipment and related services. The terms and conditions of those task orders are set out in the Contract; the price, milestone dates and scope of services will be set out in the individual task orders. The SFMTA previously entered into two sole source contracts with Thales to obtain proprietary ATCS technical services, software and equipment to maintain and improve the function of the ATCS, which are now expired. (SFMTA Contract No. 1221 Framework Master Agreement for Purchase Order to obtain ATCS goods and services from Thales, dated August 2006, for an amount not to exceed \$5,000,000 and SFMTA Contract No. 1226 Advanced Train Control System Improvement Services, dated April 21, 2009.) Those contracts are nearly identical to the proposed Contract, which will allow the SFMTA to procure from Thales necessary equipment, services, to update the ATCS, more efficiently and with reduced transactional costs as compared to negotiating multiple contracts with Thales.

Staff have identified over \$29,000,000 in subway train control infrastructure investment which the SFMTA may implement as funding and Agency resources allow. Staff anticipates that the following equipment and software and associated services would be procured the proposed Contract:

- a. Software functionality upgrades
- b. Integration of subway train control with surface interlocks
- c. Upgrade of trains and main computers to allow tracking and management of surface operations
- d. Equipment and software to maintain a state-of-good repair
- e. Analysis of system operations and recommendations for improvement
- f. Hardware/software design, implementation, and test resources to support this scope

Tasks procured under this agreement shall follow required Director, MTAB, and BOS approval thresholds for contract value.

This Contract was procured in accordance with federal requirements for sole source contracts.

Due to the proprietary nature of the current scope of services, it was determined by the Contract Compliance Office that Small Business Entity (SBE) subcontracting participation requirement is not applicable to this contract. Changes or additions to the anticipated scope will be resubmitted to Contract Compliance for evaluation.

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STAKEHOLDER ENGAGEMENT

The transit division service owner was involved in defining the scope of services to be delivered under this agreement.

ALTERNATIVES CONSIDERED

The ATCS and its components, including software, are proprietary technology of Thales. Compatible equipment, software, and specialized technical service can be procured only from Thales.

The alternatives to approving this contract are to not implement any ATCS enhancements and discontinue state of good repair projects for the ATCS, or to negotiate multiple contracts with Thales for necessary ATCS services, software and equipment. The first alternative would result in increased disruption to passenger service due to failures of ATCS equipment approaching obsolescence and the inability to address changes to transit service that impact subway operations. The second option would require negotiating many contracts with Thales, resulting in additional transaction costs, differing contract terms and conditions, and delays to ATCS improvements.

FUNDING IMPACT

This agreement does not authorize the expenditure of any funds. A funding plan will be developed specific to each task order. It is anticipated these task orders will be funded through the Fixed Guideway Capital Program. The FY21-FY25 Capital Improvement Program was approved with over \$50M of funding dedicated to programmatic categories eligible for this type of work. These types of grants use 20% local funds to leverage for the remaining 80% which come from federal funds.

ENVIRONMENTAL REVIEW

On April 1, 2020, the SFMTA, under authority delegated by the Planning Department, determined that the Thales Transportation and Securities' ATCS Service contract approval is not defined as a "project" under the California Environmental Quality Act (CEQA) pursuant to Title 14 of the California Code of Regulations Sections 15060(c) and 15378(b).

A copy of the CEQA determination is on file with the Secretary to the SFMTA Board of Directors and is incorporated herein by reference.

OTHER APPROVALS RECEIVED OR STILL REQUIRED

Personal Services Contract (PSC) 45971 - 19/20 was approved by the Civil Service Commission (CSC) on 10/21/19.

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Contract No. SFMTA-2020-20 is contingent upon approval by the San Francisco Board of Supervisors under Charter Section 9.118, as the contract expenditures are anticipated to exceed \$10,000,000.

The City Attorney's Office has reviewed this calendar item.

RECOMMENDATION

Staff recommends that the SFMTA Board of Directors authorize the Director of Transportation to execute Contract No. SFMTA-2020-20, Advanced Train Control System Equipment, Software and Professional Services Task Order Agreement, with Thales Transport & Security, Inc., for the Advanced Train Control System, in an amount not to exceed \$30,000,000 and an initial term of seven years with an option to extend the term for an additional two years.

SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
BOARD OF DIRECTORS

RESOLUTION No. _____

WHEREAS, In August 1992, the City, through its Public Utilities Commission, awarded Contract No. MR-1034R with Alcatel (now Thales Transport and Security), to provide a communications-based Advanced Train Control System (ATCS) to the Municipal Railway; and,

WHEREAS, The ATCS is a specialized system critical to the operation of light rail vehicles in the subway, controlling vehicle routing, speed, headway, safe separation, and braking; and,

WHEREAS, The ATCS is a custom system that provides location and arrival prediction data for passenger information systems using proprietary hardware and software available only from Thales; and,

WHEREAS, The SFMTA seeks to update the functionality of the ATCS by obtaining from Thales specialized technical services, equipment and software upgrades for the ATCS that are not available from other vendors; and,

WHEREAS, The SFMTA wishes to obtain software, hardware, and related services to maintain and improve the ATCS under Contract No. SFMTA-2020-20, which is more efficient and saves on transactional costs, as compared to negotiating a separate contract for each ATCS procurement; and,

WHEREAS, This Contract was procured in accordance with federal requirements for sole source contracts; and,

WHEREAS, On April 1, 2020, the SFMTA, under authority delegated by the Planning Department, determined that the services, software and equipment to be procured under the Contract 2020-20 is not a “project” under the California Environmental Quality Act (CEQA) pursuant Title 14 of the California Code of Regulations Sections 15060(c) and 15378(b); and,

WHEREAS, A copy of the CEQA determination is on file with the Secretary to the SFMTA Board of Directors, and is incorporated herein by reference; now, therefore, be it,

RESOLVED, That the SFMTA Board of Directors authorizes the Director of Transportation to execute Contract No. SFMTA-2020-20, Advanced Train Control System Equipment, Software and Professional Services Task Order Agreement, with Thales Transport & Security, Inc., for the Advanced Train Control System, in an amount not to exceed \$30,000,000 and an initial term of seven years with an option to extend the term for an additional two years.

I certify that the foregoing resolution was adopted by the San Francisco Municipal Transportation Agency Board of Directors at its meeting of Tuesday, September 15, 2020.

Secretary to the Board of Directors
San Francisco Municipal Transportation Agency