

MOTION NO. M2013-114

**Positive Train Control Software and Licensing Agreement**

MEETING:	DATE:	TYPE OF ACTION:	STAFF CONTACT:	PHONE:
Capital Committee	12/12/13	Recommendation to Board	Ahmad Fazel, DECM Executive Director	206-398-5389
Board	12/19/13	Final Action	<b>Eric Beckman, Project Director</b> <b>Jodi Mitchell, Project Manager</b>	206-398-5251 206-398-5080

PROPOSED ACTION

Authorizes the chief executive officer to execute a sole source contract with Meteorcomm, LLC to provide Interoperable Train Control software and associated licenses for the Positive Train Control system in the amount of \$392,968 with a 10% contingency of \$39,297, for a total authorized contract amount not to exceed \$432,265.

KEY FEATURES SUMMARY

- The Rail Safety Improvement Act of 2008 and other federal regulations require all railroads that carry passenger trains and certain toxic materials to be equipped with Positive Train Control (PTC) technology that is tested, commissioned, and certified by December 31, 2015.
- In order to comply with this act and federal regulations, Sound Transit must procure Interoperable Train Control (ITC) messaging software for radios onboard all Sound Transit locomotives to allow the locomotives to transmit data between the base stations, wayside signals, and BNSF's train communications system used to operate positive train control.
- This software is available only through Meteorcomm, LLC which owns, controls, and updates the software.
- This software will have on-going annual licensing fees that have been estimated and will be included within the Sounder operations budget following completion of the capital project.
- This cost was anticipated and is included in the budget. This scope of work was originally included in the main contract for design, installation, testing and commissioning of the PTC system on Sounder vehicles. Removing this element of scope and the associated costs from the main contract and instead procuring the software directly will reduce Sound Transit's costs by avoiding contractor mark-up and overhead costs.

BACKGROUND

PTC systems are integrated command, control, communications, and information systems for controlling train movements with safety, security, precision, and efficiency. For example, PTC systems issue movement authorizations to trains and maintenance-of-way crews and track the location of the trains. It improves railroad safety by reducing the probability of collisions between trains and roadway workers. Another important feature will be its ability to limit accidents by not allowing trains to exceed speed limits. System workers will have the capability to stop trains when the train crew is incapacitated. Sound Transit's PTC system is also expected to provide greater schedule reliability and greater track capacity.

The Rail Safety Improvement Act of 2008 and other federal regulations require all railroads that carry passenger trains and certain toxic materials to be equipped with PTC technology that is tested, commissioned, and certified by December 31, 2015.

The first step in meeting the deadline for implementation was to file a PTC Implementation Plan (PTCIP) with the FRA for review and approval. The PTCIP outlines the agency strategy and approach for meeting the objectives and timeline of the legislation. Sound Transit completed this plan in 2010 consistent with the FRA timeline for doing so and has an approved PTCIP on file. Positive Train Control will be implemented on Sounder equipment and Sound Transit owned railway and is wholly consistent with that plan, including the software being procured under this action.

## FISCAL IMPACT

The 2013 TIP for the Positive Train Control is \$53,054,279. Within that amount \$27,580,735 has been set aside in the Construction phase. The proposed action would commit \$432,265 for this line item, leaving a remaining budget balance of \$2,175,238. This cost was anticipated and is included in the budget.

This action is within the adopted budget and sufficient monies remain after approval of this action to fund the remaining work in the construction phase as contained in the current cost estimates.

### Positive Train Control

	2013 TIP	Board Approvals	This Action	Board Approved Plus Action	Uncommitted / (Shortfall)
Agency Administration	2,238	372		372	1,866
Preliminary Engineering	-			-	-
Final Design	15,035	13,584		13,584	1,451
Right of Way				-	-
Construction	27,581	24,973	432	25,405	2,175
Construction Services	1,852	1,694		1,694	158
Third Party Agreements	6,348	3,900		3,900	2,448
Vehicles				-	-
Contingency				-	-
<b>Total Current Budget</b>	<b>53,054</b>	<b>44,524</b>	<b>432</b>	<b>44,956</b>	<b>8,098</b>

#### Phase Detail

Construction					
Construction	6,348	3,900	432	4,332	2,015
Construction Unallocated Contingency	-	-		-	-
<b>Total Phase</b>	<b>6,348</b>	<b>3,900</b>	<b>432</b>	<b>4,332</b>	<b>2,015</b>

#### Contract Detail

Meteorcomm, LLC	Board Approvals to Date	Current Approved Contract Status	Proposed Action	Proposed Total for Board Approval
Contract Amount	-	-	393	393
Contingency Amount	-	-	39	39
<b>Total Not to Exceed Value</b>	<b>-</b>	<b>-</b>	<b>432</b>	<b>432</b>
Percent Contingency	0%	0%	10%	10%

#### Notes:

Amounts are expressed in Year of Expenditure \$000s.

Board Approvals = Committed To-Date + Contingency, and includes pending Board actions.

2013 TIP = Project budget located on page 113 of 206 of the Adopted 2013 Transit Improvement Plan (TIP)

R2013-06 added \$13.8 million to the Lifetime Budget to total \$53 million.

## SMALL BUSINESS PARTICIPATION

Not applicable to this action.

EQUAL EMPLOYMENT WORKFORCE PROFILE

Not applicable to this action

APPRENTICE UTILIZATION COMMITMENT

Not applicable to this action.

PUBLIC INVOLVEMENT

Not applicable to this action.

TIME CONSTRAINTS

A one month delay would not impact the project.

PRIOR BOARD/COMMITTEE ACTIONS

Not applicable to this action.

ENVIRONMENTAL REVIEW

JI 11/26/2013

LEGAL REVIEW

JW 12/06/2013

## **MOTION NO. M2013-114**

A motion of the Board of the Central Puget Sound Regional Transit Authority authorizing the chief executive officer to execute a sole source contract with Meteorcomm, LLC to provide Interoperable Train Control software and associated licenses for the Positive Train Control system in the amount of \$392,968 with a 10% contingency of \$39,297, for a total authorized contract amount not to exceed \$432,265.

### **BACKGROUND:**

Positive Train Control (PTC) systems are integrated command, control, communications, and information systems for controlling train movements with safety, security, precision, and efficiency. For example, PTC systems issue movement authorizations to trains and maintenance-of-way crews and track the location of the trains. It improves railroad safety by reducing the probability of collisions between trains and roadway workers. Another important feature will be its ability to limit accidents by not allowing trains to exceed speed limits. System workers will have the capability to stop trains when the train crew is incapacitated. Sound Transit's PTC system is also expected to provide greater schedule reliability and greater track capacity.

The Rail Safety Improvement Act of 2008 and other federal regulations require all railroads that carry passenger trains and certain toxic materials to be equipped with PTC technology that is tested, commissioned, and certified by December 31, 2015.

The first step in meeting the deadline for implementation was to file a PTC Implementation Plan (PTCIP) with the FRA for review and approval. The PTCIP outlines the agency strategy and approach for meeting the objectives and timeline of the legislation. Sound Transit completed this plan in 2010 consistent with the FRA timeline for doing so and has an approved PTCIP on file. Positive Train Control will be implemented on Sounder equipment and Sound Transit owned railway and is wholly consistent with that plan, including the software being procured under this action.

The Interoperable Train Control (ITC) messaging software required for radios onboard all Sound Transit locomotives will allow the locomotives to transmit data between the base stations, wayside signals, and BNSF's train communications system used to operate positive train control.

This software is available only through Meteorcomm, LLC which owns, controls, and updates the software. This software will have on-going annual licensing fees that have been estimated and will be included within the Sounder operations budget following completion of the capital project.

The software cost was anticipated and is included in the budget. This scope of work was originally included in the main contract for design, installation, testing and commissioning of the PTC system on Sounder vehicles. Removing this element of scope and the associated costs from the main contract and instead procuring the software directly will reduce Sound Transit's costs by avoiding contractor mark-up and overhead costs.

**MOTION:**

It is hereby moved by the Board of the Central Puget Sound Regional Transit Authority that the chief executive officer is authorized to execute a sole source contract with Meteorcomm, LLC to provide Interoperable Train Control software and associated licenses for the Positive Train Control system in the amount of \$392,968 with a 10% contingency of \$39,297, for a total authorized contract amount not to exceed \$432,265.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on December 19, 2013.



Pat McCarthy  
Board Chair

ATTEST:



Marcia Walker  
Board Administrator