

**PMOC REPORT**

**OP 36 – Buy America Review (Pre-Award)**

**Honolulu Rail Transit Project**

Honolulu Authority for Rapid Transportation (HART)  
City and County of Honolulu  
Honolulu, HI

July 2012 (FINAL)

PMOC Contract Number: DTFT60-09-D-00012  
Task Order No. 2: Honolulu Rail Transit Project  
Project No: DC-27-5140  
Work Order No. 3  
OP Referenced: OP 36

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Length of Time Assigned: Five Years (November 18, 2009 through November 17, 2014)

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## 1.0 EXECUTIVE SUMMARY

The City and County of Honolulu (grantee) has embarked on the design and construction of a regional 20-mile, double tracked, elevated, and fully automated rail transit system known as the Honolulu Rail Transit Project (“Project”), serving the metropolitan Honolulu area. Honolulu Authority for Rapid Transportation (HART) will be managing the Project. The grantee expects to open the first segment of the system in 2015 with the entire line in operation by 2019. The grantee is preparing a request for a Full Funding Grant Agreement (FFGA).

The grantee has executed several Design-Build (DB) contracts and currently, a Design-Build-Operate-Maintain (DBOM) contract, or Core Systems Contract (CSC), in support of this effort. This CSC contract is quite comprehensive, as it includes design and supply of vehicles, traction power, automatic train control, fare collection and communications for the system as well as operation and maintenance of the systems equipment and the vehicle fleet during the activation of the system and revenue service for ten years or more after opening. The grantee received proposals for the CSC contract and awarded it to Ansaldo Honolulu JV (AHJV or Ansaldo), which includes Ansaldo Breda (AB) as the vehicle supplier. To meet the demand as required by the grantee in the CSC RFP, Ansaldo has proposed supplying 80 “Light Metro” vehicles for the Project at a total cost of \$180.1 million.

The Project will be federally funded under a Full Funding Grant Agreement (FFGA) with the Federal Transit Administration (FTA). HART executed a contract with Ansaldo in January 2012. The vehicle contract will also become part of the federally funded Project. In accordance with FTA requirements regarding the use of federal funds for the procurement of rolling stock, delineated in 49 CFR Part 661 and 663, HART conducted a Pre-Award Audit of Ansaldo’s vehicle subcontractor Ansaldo Breda on April 4-6, 2011 prior to entering into a formal contract.

At the request of FTA, the Jacobs Engineering Group, Inc. (Jacobs) Project Management Oversight Contractor (PMOC) performed a review of HART’s **Pre-Award Buy America Audit Report, Rev. 0 dated October 17, 2011** as part of the ongoing effort of Jacobs PMOC team’s oversight responsibility for the Project as related to the FTA’s grant process. This is the second review of this report by the PMOC; an informal review of the draft report was conducted in November 2011. HART’s final report is identical to the draft report except for the inclusion of signed certifications in the final report.

The PMOC used the FTA Oversight Procedure 36 (OP 36) titled “Buy America Review” and the checklist in its Appendix C for performing the review, as well as the experience and professional opinion of the PMOC reviewers, as a guide to determine HART’s compliance with Buy America regulation. PMOC’s review was limited to contents of the report and appendices therein supplied by HART. OP 36 requires that the PMOC confirm grantee’s compliance with the following specific requirements of Section 6.1.1 Pre-Award Buy America Review for Rail projects:

- *Buy America certification, verifying that rail vehicles will contain a minimum of 60% components by cost.*
- *Final assembly of the rail vehicles will take place in the U.S.*
- *Purchaser’s Requirements certification.*

Based upon review of the audit report submitted, including supporting documentation, the PMOC confirms that the grantee/HART and its selected contractor Ansaldo and subcontractor Ansaldo Breda comply with the above requirements at this pre-award stage.

Additionally, the PMOC concurs with the following audit report statements of compliance:

- (1) *“Based on the examination of the objective evidence and data presented by Ansaldo (vendor quote sheets, vendor certifications for domestic [USA] content, calculations, etc.), and with HART employing the BACM, the audit team calculated approximately 69 percent domestic content, which exceeds the minimum domestic content requirement of 60 percent.”*
- (2) *“Based on the objective evidence and data presented, the audit team determined that Ansaldo's technical proposal for the DBOM Contract is in compliance with HART technical specifications, and that Ansaldo is a responsible manufacturer capable of manufacturing rail vehicles in compliance with the Contract requirements and technical specifications.”*

***It should be noted that the PMOC did not and could not perform an independent validation / analysis of Ansaldo vehicle domestic content projections and the detailed breakdown provided in the report in absence of any associated cost data.*** Ansaldo considers its cost data to be confidential information and provided it only to HART’s auditors upon signing a non-disclosure agreement. Subsequently, to maintain confidentiality of such information, the auditors converted their findings into percentages only for the presentation in their audit report.

Notwithstanding a detailed audit report provided, the PMOC offers the following comments / recommendations for HART’s consideration to enhance the audit final report:

- (1) To facilitate verifying credentials and experience of HART’s auditors, either submit for the file the resumes of HART auditors or include them in an appendix to the report.
- (2) Proactively track Ansaldo Breda’s Buy America compliance, by requiring Ansaldo Breda to pay especially close attention to and identify those suppliers in HART’s report “Appendix 3: Buy America Compliance Matrix Honolulu Rail Transit Project” that may have components or assemblies or subassemblies with content close to 60% and are claimed as 100% as allowed by Buy America regulation and track their domestic content throughout the contract.  
  
This is to ensure that their domestic content will not fall below 60%, thereby impacting its 100% status and/or the overall vehicle level Buy America U.S. domestic content percentage.
- (3) In light of a substantial vehicle order quantity and long duration of the contract, conduct one or more Intermediate Audits to ensure Ansaldo Breda’s continued Buy America compliance.

## 2.0 INTRODUCTION

The grantee has executed several Design-Build (DB) contracts and currently, a Design-Build-Operate-Maintain (DBOM) contract, or Core Systems Contract (CSC), in support of this effort. This CSC contract is quite comprehensive, as it includes design and supply of vehicles, traction power, automatic train control, fare collection and communications for the system as well as operation and maintenance of the systems equipment and the vehicle fleet during the activation of the system and revenue service for ten years or more after opening. The grantee received proposals for the CSC contract and awarded it to Ansaldo Honolulu JV (AHJV or Ansaldo), which includes Ansaldo Breda (AB) as the vehicle supplier. To meet the demand as required by the grantee in the CSC RFP, Ansaldo has proposed supplying 80 “Light Metro” vehicles for the Project at a total cost of \$180.1 million.

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- *Purchaser’s Requirements certification.*

### 3.0 BUY AMERICA PRE-AWARD AUDIT REPORT OVERVIEW

This Pre-Award Audit Report provided by HART is well-organized and includes the following:

- Section 1.0, Executive Summary – statement of Buy America regulation compliance
- Section 2.0, Introduction – Project background and AHJV selection process
- Section 3.0, FTA Buy America Requirements – Statement and explanation of Buy America Pre-Award Audit requirements
- Section 4.0, Pre-Award Audit Procedure and Methodology – Description of audit process steps
- Section 5.0, Pre-Award Audit Performance – Explanation of process used for the 3-day audit at AHJV Honolulu office and 2-day visit to proposed final assembly plant
- Section 6.0, Pre-Award Audit Results – Validation summary of AHJV’s projected domestic content based upon the audit and confirmation of compliance with the technical specification
- Appendices – (1) HART Pre-Award Audit Notifications;(2) AHJV’s Certificate of Compliance;(3) HART Buy America Compliance Matrix Honolulu Rail Transit Project;(4) AHJV’s Verification and Validation Letter;(5) HART – Ansaldo Breda’s Confidentiality Agreement;(6) Entrance & Exit Meeting Attendance Sign-in Sheets;(7) Ansaldo Breda’s Final Assembly Activities and Photos at Pittsburg Plant;(8) Stop/Release Work Orders, and (9) HART Certifications – Pre-Award Buy America Compliance and Pre-Award Purchaser’s Requirements Certification

## 4.0 PMOC'S OBSERVATIONS AND COMMENTS

The PMOC used OP 36 as guide to determine HART's compliance with Buy America regulation; and additionally, reviewed the Buy America Pre-Award Audit Report for process and reasonability.

*It should be noted that the PMOC did not and could not perform an independent validation / analysis of Ansaldo Breda's domestic content projections and the detailed breakdown provided in the report in absence of any associated cost data.* Ansaldo Breda considers its cost data to be confidential information; and provided it only to HART's auditors upon signing a non-disclosure agreement. Subsequently, to maintain confidentiality of such information, the auditors converted their findings into percentages only for the presentation in their audit report.

The PMOC's observations / comments below are based upon the review of the report as well as PMOC's professional experience:

### 4.1 HART's Compliance with OP 36

OP 36 Section 3.0 Objectives provides the following guidance to the PMOC to review and determine grantee's Buy America compliance:

- (1) *Evaluation of a Grantee's Buy America and related certifications, as they relate to rail vehicle procurements* – HART is required to have on file two signed certifications, namely Pre-Award Buy America Compliance Certification and Pre-Award Purchaser's Requirements Certification. They are part of this draft audit report, and upon review are acceptable.
- (2) *Evaluation of data provided to Grantee's by manufacturers* – "Appendix 3: Buy America Compliance Matrix Honolulu Rail Transit Project" provides satisfactory evidence that Ansaldo provided all of the needed data to HART auditors to review and independently analyze Ansaldo Breda's Buy America compliance.
- (3) *Monitoring of Buy America and related provisions before vehicles are delivered and placed into revenue service* – These provisions are not applicable to Pre-Award Buy America audit.
- (4) *Checking of a Grantee's files and records that will assure early detection of any deficiencies in procurement regulations* – None are noted at this time. The PMOC will continue to monitor them as part of PMOC's recurring oversight activity.
- (5) *Guiding Grantees when manufacturers are found to be deficient in Buy America or other related requirements* – None are noted at this time. The PMOC will continue to monitor as part of PMOC's recurring oversight activity and advise HART as appropriate.
- (6) *Final assembly sites along with tangible information and references to FTA regulations that will allow the sites to accurately evaluate Buy America audit*

*results for compliance* – “Appendix 7 – Ansaldo’s Final Assembly Activities and Photos at Pittsburg Plant” provides satisfactory evidence of Ansaldo Breda’s Buy America final assembly work scope compliance.

- (7) *Ensuring timely intervention when there are indications that Buy America might not be met or the Grantee’s audit is inadequate* – None are noted at this time. The PMOC will continue to monitor as part of PMOC’s recurring oversight activity and advise HART as appropriate.
- (8) *Requesting FTA intervention when Buy America audits uncover deficiencies; and providing reporting protocols to be adopted* – None are noted at this time and FTA’s intervention is not warranted. The PMOC will continue to monitor as part of PMOC’s recurring oversight activity and advise FTA as needed.

PMOC’s this draft audit report Appendix B “HART’s Compliance of OP #36, APPENDIX C, Pre-Award, Intermediate, and Post-Delivery Review Checklists”, provides an overall summary of HART’s Buy America compliance to OP 36 at the vehicle contract pre-award stage.

Additionally, OP 36 Section 6.1.1 Pre-Award Buy America Review for Rail Projects also states that the PMOC shall confirm the Grantee’s compliance with the following specific requirements:

- Buy America certification, verifying that rail vehicles will contain a minimum of 60% components by cost.
- Final assembly of the rail vehicles will take place in the U.S.
- Purchaser’s Requirements certification. See description of this requirement in 6.1.2, below.

***Based upon the review, the PMOC confirms HART’s compliance with the OP 36 requirements listed above.***

#### **4.2 PMOC’s Overall Observations**

The following observations on the audit report are presented:

- It was not possible for the PMOC to perform an independent validation due to lack of Ansaldo Breda’s cost data. However, upon review of “Appendix 3: Buy America Compliance Matrix Honolulu Rail Transit Project” in HART’s Buy America audit report and based on PMOC’s professional experience with Buy America audits, the PMOC concurs with the statement of compliance for audit results determining vehicle domestic content for the Ansaldo Breda LRVs, which is nearly 69% and well in excess of 60% Buy America regulation minimum requirement per 49 CFR 661.
- HART auditors conducted the audit in a professional manner and followed a structured process to conduct the audit. The audit was performed in compliance with 49 CFR 661 Buy America Requirements and 49 CFR 663 Pre-Award & Post-Delivery Audits of Rolling Stock Purchases.

- The report is well written and prepared in a thorough and comprehensive manner; and explains the process and results in sufficient detail to justify Ansaldo Breda’s Buy America compliance at this pre-award stage.
- The “Appendix 3: Buy America Compliance Matrix Honolulu Rail Transit Project” of the HART Buy America report and documentation provided in other Appendices of the report is acceptable as a detailed backup to support audit result statements. Appendix 3 provides a breakdown of the Ansaldo Breda vehicle U.S. and Foreign content, which is more detailed than the list of the minimum components identified in 49 CFR 661.11 Appendix C. The matrix also identifies manufacturing & assembly locations of components for ready validation.
- The “Appendix 3: Buy America Compliance Matrix Honolulu Rail Transit Project” of the HART Buy America report provides a detailed drilling down into the list of Ansaldo Breda vehicle components, and satisfactorily demonstrates at this pre-award stage that changes at lower levels will not cause any major sub-components, claimed at 100% U.S. content, to not comply.

However, it is not readily apparent if there are any subcomponents with U.S. domestic content close to the minimum 60% and have claimed it to be 100% domestic content as allowed by Buy America regulation.

- Vehicle Final Assembly work scope proposed by Ansaldo Breda is substantially greater than the final assembly minimum operations required by 49 CFR 661.11 Appendix D.
- Vehicle Final Assembly facility in Pittsburg, California, proposed by Ansaldo Breda for HART vehicle procurement, has the necessary capability & capacity to perform the required work (Appendix 7 of the report). Currently, Ansaldo Breda is completing the final assembly of Los Angeles Metro P2550 LRVs in this plant.
- Ansaldo Breda is not requesting any waivers from FTA for either the domestic content or the final assembly of the vehicles, including that for pilot cars.
- The PMOC concurs with audit results statement determining Ansaldo Breda design compliance to the specification requirements.

## 5.0 CONCLUSION / RECOMMENDATIONS

Based upon review of the audit report submitted, including supporting documentation, the PMOC confirms that the grantee/HART and its selected contractor Ansaldo and subcontractor Ansaldo Breda comply with the above requirements at this pre-award stage.

The PMOC offers the following comments / recommendations for HART's consideration:

- (1) Resumes of HART's auditors should be submitted for the file or their capsule resumes should be added in an appendix to the report to allow a ready verification of the credentials and experience of the auditors.
- (2) Proactively track Ansaldo Breda's Buy America compliance, by requiring Ansaldo Breda to pay especially close attention to and identify those suppliers in HART's report "Appendix 3: Buy America Compliance Matrix Honolulu Rail Transit Project" that may have components or assemblies or subassemblies with content close to 60% and are claimed as 100% as allowed by Buy America regulation and track their domestic content throughout the contract.  
  
This is to ensure that their domestic content will not fall below 60%, thereby impacting its 100% status and/or the overall vehicle level Buy America U.S. domestic content percentage.
- (3) In light of a substantial vehicle order quantity and long duration of the contract, conduct one or more Intermediate Audits to ensure Ansaldo Breda's continued Buy America compliance.

## APPENDICES

### **Appendix A: Acronym List**

AB	▪ Ansaldo Breda
AHJV or Ansaldo	▪ Ansaldo Honolulu Joint Venture
BACM	▪ Buy America Compliance Matrix
CFR	▪ Code of Federal Regulations
CSC	▪ Core Systems Contractor
DB	▪ Design Build
DBOM	▪ Design Build Operate Maintain
FFGA	▪ Full Funding Grant Agreement
FTA	▪ Federal Transportation Administration
HART	▪ Honolulu Authority for Rapid Transportation
LRV	▪ Light Rail Vehicle
OP	▪ Oversight Procedure
PMOC	▪ Project Management Oversight Contractor

**Appendix B: HART’s Compliance of OP #36, APPENDIX C, Pre-Award, Intermediate, and Post-Delivery Review Checklists**

<b>Item</b>	<b>Issue</b>
<b>1.0</b>	<b>Specification</b>
1.1	<i>Does the specification contain requirements that make it hard for the supplier to achieve Buy America requirements</i> No.
1.2	<i>Does the specification require the supplier to meet the Buy America Act and refer specifically to the relevant sections of Title 49, CFR, Sections 661 and 663</i> Yes, the HART specifications RFP-DTS-198413 require a pre-award Buy America audit be conducted and must meet the requirements of 49 CFR Parts 661 and 663.
1.3	<i>Does the specification call for Pre-Award and Post Delivery Audits for Buy America</i> Yes.
1.4	<i>Does the Grantee’s procurement documentation mandate or require an Intermediate Buy America Audit, and is the Audit planned at such a point that it will identify whether or not the procurement is on target but still allow time to take corrective action(s) if there is a risk of failing to comply?</i> No. However, Buy America regulation does not mandate an Interim Buy America audit.
<b>2.0</b>	<b>Pre Award Audit</b>
2.1	<i>Is the Grantee’s auditor experienced in Buy America Audits?</i> Not known; the PMOC has recommended that resumes of HART auditors be submitted to file or be included in HART’s audit report.
2.2	<i>Are there any major assemblies or sub-assemblies identified in the Pre-Award review with Domestic content close to or below 60%?</i> There are several components (e.g. carbody, trucks, diagnostic equipment, high speed circuit breaker, passenger counter, operating desk, propulsion gear box, etc.) that are below 60%, but their domestic and foreign content percentages have been correctly allocated.
2.3	<i>Are there significant sub-assemblies with content close to 60% that are claimed as 100% in the Major Assembly?</i> Domestic content of sub-assemblies is not readily apparent from the report, but such lack of detail is not uncommon at the pre-award stage since no subcontracts are signed with suppliers. There are a few assemblies listed with their lowest domestic content around 63%.
2.4	<i>Has the auditor drilled down into the list of vehicle components sufficiently to demonstrate that changes at lower levels will not cause any major sub-assemblies, claimed at 100%, to not comply?</i> Yes.
2.5	<i>Will the vehicle bodies be manufactured in the US, or will they arrive as “knock down” components from abroad, requiring minor assembly work?</i> The vehicle bodies will be manufactured outside the U.S.
2.6	<i>What inspection services does the Grantee propose?</i> HART plans to have a resident inspector(s) at Ansaldo Breda’s manufacturing and final assembly plants.
<b>3.0</b>	<b>Intermediate Audit</b> – Questions in this section are not applicable at this time because HART’s Buy America audit and PMOC’s report is for Pre-Award of the contract.
3.1	<i>Has the Grantee performed an Intermediate Audit?</i>
3.2	<i>Is the Grantee’s auditor experienced in Buy America Audits?</i>
3.3	<i>Are there major assemblies with Domestic content close to or below 60%?</i>
3.4	<i>Are there significant sub-assemblies with content close to 60% that are claimed as 100% in the Major Assembly?</i>
3.5	<i>Has the auditor drilled down sufficiently to demonstrate that changes at lower levels will not cause any major sub-assemblies, claimed at 100%, to not comply?</i>
3.6	<i>Are the vehicle bodies manufactured in the US, or do they arrive as “knock down” components from abroad, requiring minor assembly work?</i>
3.7	<i>Does the Grantee have on-site inspection?</i>
3.8	<i>Does the Grantee’s inspection coverage include major sub-suppliers?</i>
3.9	<i>If the Grantee did not perform an Intermediate Audit:</i>
3.10	<i>Have there been any substantive changes in sourcing since the Pre-Award audit</i>
3.11	<i>Do any of the changes impact Major Assemblies with close to or below 60% domestic content?</i>

<b>4.0</b>	<b>Post Delivery Audit</b> – Questions in this section are Not applicable at this time because HART’s Buy America audit and PMOC’s report is for Pre-Award of the contract.
4.1	<i>Is the Grantee’s auditor experienced in Buy America Audits?</i>
4.2	<i>Did the Grantee obtain and retain Pre-Award Buy America certifications from successful suppliers for purchases of more than \$100,000?</i>
4.3	<i>Did the Grantee conduct Pre-Award and Post-Delivery audits for its purchase of rolling stock over \$100,000? Does the Grantee have properly completed certifications for each review in its contract files?</i>
4.4	<i>If the Grantee is purchasing rolling stock with multiple delivery dates, using options, or multi-year procurements, and, if so, has the Grantee/Sponsor performed and certified Pre-Award and Post-Award audit for each group of vehicles, before placing them into revenue service?</i>
4.5	<i>Has the Grantee requested and/or received a waiver for any part of its purchase of vehicles? Does the Grantee have the FTA approved waiver in its procurement files for PMOC review?</i>
4.6	<i>Are there major assemblies with Domestic content close to or below 60%?</i>
4.7	<i>Are there significant sub-assemblies with content close to 60% that are claimed as 100% in the Major Assembly?</i>
4.8	<i>Has the auditor drilled down sufficiently to demonstrate that changes at lower levels will not cause any major sub-assemblies, claimed at 100%, to not comply?</i>
4.9	<i>Were the vehicle bodies manufactured in US, or did they arrive as “knock down” components from abroad, requiring minor assembly work?</i>