



Electronic Information Environment (EIE) Project

Business Use Case (BUC) BUC 3.51 Navy - Exchange Part Request Report Data

EIE Project

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1. EIE Business Use Case¹ Overview

1.1 Introduction

Performance Based Contracting (PBC) is a set of guidelines to Canada Major Capital Projects (MCPs) on how to model a Platform acquisition and in-service support (ISS) processes. Under these guidelines Canada is responsible to perform some corrective and/or preventive maintenance activities on the Platform. The ISS Contractor will own, manage and deliver to the specified Hand-Over Point (HoP) all materiel required to support the Platform, with the exception of excluded systems. In order for Canada and the ISS Contractor to fulfill their obligations under PBC, specific datasets must be exchanged between Canada and ISS Contractor.

The collection of information systems provided by Canada and ISS Contractor, used to maintain the Platform and the various information exchange mechanism, is collectively known as the Electronic Information Environment (EIE).

The web services and supporting infrastructure which enable the exchange of data between ISS Contractor and Canada's operational systems in support of PBC between Canada and the ISS Contractor(s) is collectively known as Electronic Data Exchange (EDE). The EDE components span application nodes, network zones and the Internet.

Given the significance of materiel demand and supply in the overall success of contracted performance objectives of PBC and platform operational availability, all data exchange between Canada Supply System (CSS) and the ISS Contractor systems will have to occur in near real-time via EDE.

1.2 Purpose

The ISS Contractor will be responsible for monitoring the materiel consumption and stock level of the Canada storage locations and maintaining defined stock levels. In order to accurately monitor inventory level and demand satisfaction, CSS will send Inventory Visibility Reports (Inventory Report, Part Request Report, and Usage Report) to the ISS Contractor, via EDE on a scheduled basis.

The ISS Contractor can use this information to track inventory levels of ISS Contractor-supplied spares and STTE, and may use the information provided in the reports to adjust inventory levels and calculate performance metrics.

This Business Use Case (BUC) describes the exchange of the demand satisfaction data (the Part Request Report) between Canada and ISS Contractor for materiel managed according to PBC.

¹ "Business Use Case: A business process, representing a specific workflow in the business; an interaction that a stakeholder has with the business that achieves a business goal. It may involve both manual and automated processes and may take place over an extended period of time." - <http://www.ibm.com/developerworks/rational/library/apr07/english/>. Also defined as such in EIE Solution Architecture.

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1.3 Intended Audience

The intended audience for this business use case includes:

- ISS Contractors who require detail of their business service-level interactions, benefits and obligations under PBC.
- All Canada personnel implementing the PBC.
- Solution Architects who will define a Business Service Model for the business service(s) that are described.
- Functional Testers who will use the business use case to define test scenarios for Integration testing.
- Designers who will perform detailed design and unit test.

1.4 References and Traceability

Business Process documents

- [Ref. 1] PBC Business Process Catalogue Annex M: Navy Supply Process Model - In the Context of Performance Based Contracting (PBC)
- [Ref. 2] PBC Business Process Catalogue Annex L: Navy Maintenance Process Model - In the Context of Performance Based Contracting (PBC)

With respect to the referenced documents this BUC addresses the following sections:

Reference	Section
[Ref. 1] PBC Business Process Catalogue Annex M	Annex M – Navy Supply Process Model
[Ref. 2] PBC Business Process Catalogue Annex L	Annex L – Navy Maintenance Process Model

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2. BUC 3.51 Navy Exchange Part Request Report Data

This Business Use Case will identify processes and activities and define scenarios which apply to Part Request Report data exchange.

2.1 Overview

Identifier	BUC 3.51
Name	Navy - Exchange Part Request Report Data
Business goal	Send Part Request Report dataset to ISS Contractor for identifying requirements satisfied, and not satisfied, by stock on-hand for each relevant storage location in order to assisting the ISS Contractor in supply performance evaluation.
Stakeholders	Canada and ISS Contractor(s)
Workflow/interaction	Transfer of Part Request Report datasets between Canada and ISS Contractor on a predetermined basis. Canada initiates this data transfer to inform the ISS Contractor of the requirements satisfied, and not satisfied, by stock on-hand for each relevant storage location. Reference [Ref. 2].
Processes	Information exchange is automated (system to system). The CSS will capture the part request satisfaction data and send a Part Request Report to the ISS Contractor on a scheduled basis. Some error scenarios may require manual intervention.
Context	Business Domain: Supply materiel Functional Area: <ul style="list-style-type: none"> • PUK Replenishment • Part Request Report
Period of Time	The full lifecycle of the subject platform.
Description	The ISS Contractor will be responsible for monitoring the materiel consumption and stock level at the Canada storage locations and maintaining defined stock levels. On a predetermined schedule, Canada will collect part request satisfaction data identifying which requirements are satisfied, and not satisfied, by stock on-hand for each relevant storage location. The ISS Contractor will use this information to assist in supply performance evaluation.

2.2 Sub-Processes and Activities Supported

Refer to EIE Business Process document, [Ref. 1] for diagrams that capture business process flow supported by this BUC.

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2.3 Business Rules and Assumptions

1. A Part Request Report is created for specific ISS Contractor-owned parts that have been received in the CSS.
2. The CMMS/CSS and EDE systems shall ensure a Part Request Report dataset is sent only to the ISS Contractor system which is properly authenticated and authorized to see maintenance and materiel data for that ship class.

2.4 Actors

The following actors have been identified as performing the documented business activities:

Role Name	Role Description / Responsibilities
CMMS/CSS	Creates and sends Part Request Report data
EDE	Transports and transforms the Part Request Report data
ISS Contractor (ISS Contractor's Supply Chain Management System (SCMS))	Provides a system that will have the ability to: <ul style="list-style-type: none">• accept and process a Part Request Report data sent from Canada, and• acceptance of the acknowledge of the data from Canada

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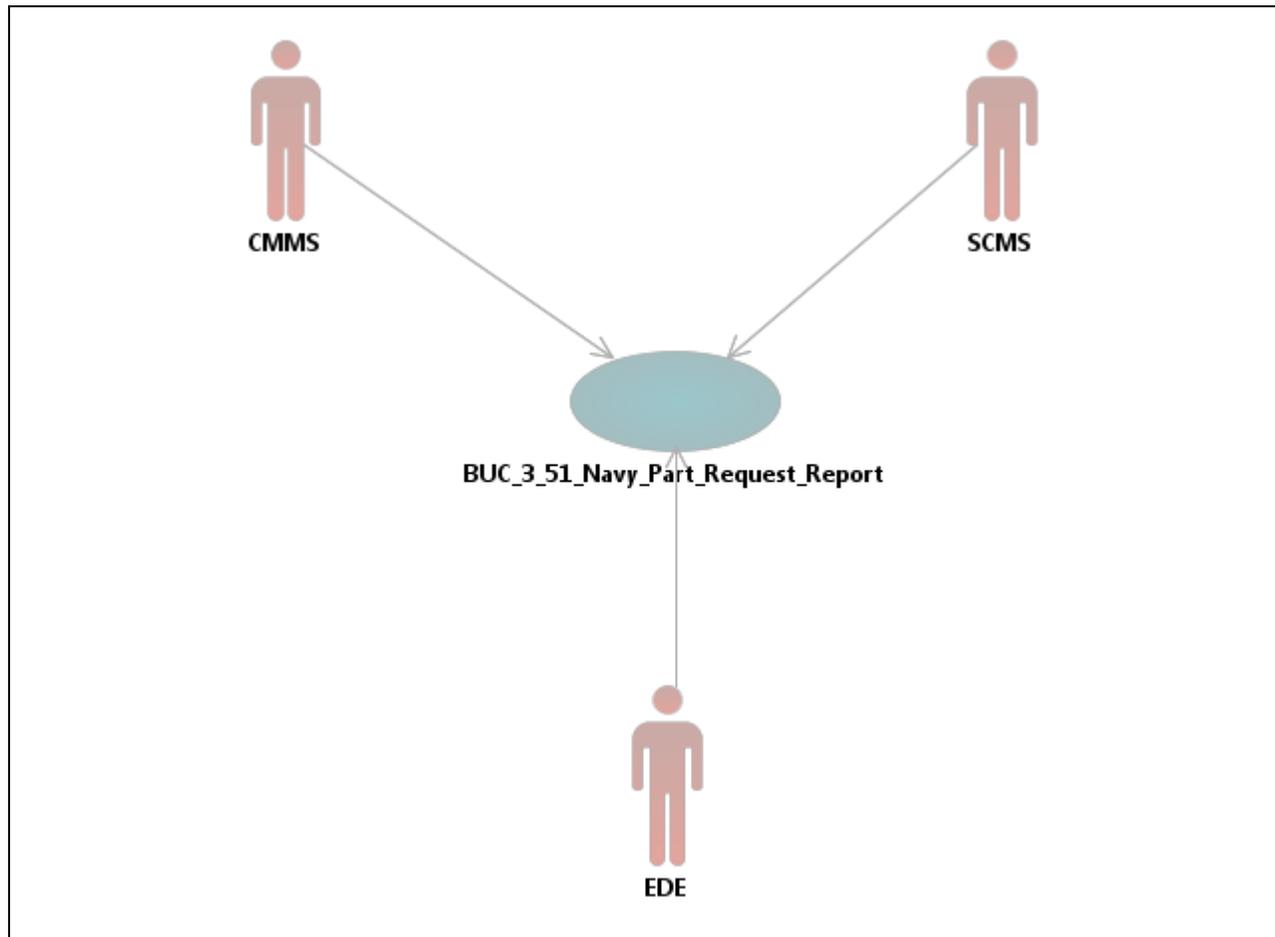


Figure 2-1 Navy - Exchange Part Request Report Data

2.5 Common Pre-Conditions

These apply to every scenario unless explicitly stated otherwise.

1. Canada and ISS Contractor have agreed upon Part Request Report dataset format (see [Functional Data Definition](#))
2. Canada and ISS Contractor have agreed upon an exchange mechanism of Part Request Report data.

2.6 Common Post-Condition(s)

The following applies to every scenario unless explicitly stated otherwise.

1. Part Request Report dataset has been received by ISS Contractor and an acknowledgement has been received by Canada.

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2.7 Common BUC Steps

Each scenario defined below includes the following common steps:

Common Steps	Step Description	Actor
Convert Part Request Report dataset to common Format	EDE converts data to XML-based format that has been adopted by Canada and ISS Contractor	EDE
Send Part Request Report dataset to ISS Contractor (SCMS)	EDE sends Part Request Report dataset to ISS Contractor, in accordance to transmission definition agreed to with ISS Contractor.	EDE
Acknowledge a receipt of Part Request Report dataset	ISS Contractor (SCMS) sends an acknowledgement receipt to EDE for received Part Request Report dataset.	ISS Contractor (SCMS)
Forward acknowledgement to CMMS/CSS	EDE forwards the acknowledgement receipt to CMMS/CSS.	EDE
Mark Part Request Report dataset as sent	CMMS/CSS updates the Part Request Report dataset as being sent.	CMMS/CSS

2.8 Scenarios²

In the following scenarios the pre-condition and trigger serve to uniquely identify the Part Request Report data exchange in the context of a maintenance and supply materiel business processes. This supports direct traceability between business processes and exchange use case scenarios.

² A scenario corresponds to a specific activity in the maintenance or supply materiel business processes when a triggering event occurs which causes a Part Request Report dataset exchange. Picture the maintenance or supply business process as proceeding horizontally through recognition of a corrective or preventive maintenance situation, through fault isolation, and maintenance activities. Each exchange use case scenario corresponds to a vertical slice from a maintenance or supply business process which results in a Part Request Report dataset being transferred to the ISS Contractor.

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2.8.1 3.51.1 Part Request Report [N1.5.3.3.5]

Scenario Name	3.51.1 Part Request Report [N1.5.3.3.5]		
Business Process	This scenario occurs in the following Supply Materiel business processes: <ul style="list-style-type: none"> • PUK Replenishment • Part Request Report 		
Business Context	<p>PUK Replenishment</p> <ul style="list-style-type: none"> • Based on the terms of the PBC, the ISS Contractor may be responsible for monitoring the stock levels of a PUK and initiating PUK replenishment in order to maintain Platform operational capability. The requirement for replenishment will vary as per the specifics of the particular platform/fleet’s requirements. In order to assist in monitoring the inventory levels of a PUK, the CSS will capture part consumption and send Usage, Part Request, and Inventory Reports to the ISS Contractor, via the EDE on a scheduled basis. <p>Part Request Report</p> <ul style="list-style-type: none"> • On a predetermined schedule, Canada will collect part request satisfaction data identifying which requirements are satisfied, and not satisfied, by stock on-hand for each relevant storage location. The ISS Contractor can use this information to assist in supply performance evaluation. 		
Precondition(s)	See Common Pre-Conditions .		
Trigger event	Part Request Report is generated on a pre-determined schedule.		
Steps	Step Name	Step Description	Actor
	Create Part Request Report	The CSS creates a Part Request Report based on the demand satisfaction data identifying which requirements are satisfied, and not satisfied, by stock on-hand for each relevant storage location.	CSS
	Send Part Request Report	The CMMS/CSS sends the Part Request Report dataset to EDE.	CMMS/CSS
	Continue with Common BUC Steps		
Postcondition(s)	See Common Post-Conditions .		
Notes			

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2.9 Information Requirements

The details of the data elements are provided in section 3.

2.10 Special Requirements

None identified.

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3. Functional Data Definition³

The data elements which make up a Part Request Report dataset are enumerated in this section. A detailed technical message schema for exchange of datasets will be provided following the awarding of the ISS contract.

3.1 Business Entity Definition – Part Request Report Dataset

The Data Entities Definition Table 3-1 below contains examples of the reference data. Specific and accurate reference data should be obtained from Canada through official channels prior to using the reference data in downstream design and implementation activities.

Table 3-1 Data Entities Definition

Name	Definition	Type	Length
Reporting Date	Date report was run.	Datetime	
Plant	High level organizational unit that describes a ship or land based entity. In combination with Ship To location it uniquely identifies the stock location being reported on. It is an enumerated field that shall be defined jointly by Canada and ISS Contractor. Each ship class / ISS Contractor may have differently agreed values for this field.	Char	4
Plant Description	English description of the Plant value	Char	16
Ship To Code (Storage Location)	In combination with Plant, it uniquely identifies the stock location being reported on. It is an enumerated field that shall be defined jointly by Canada and ISS Contractor. Each ship class/ ISS Contractor may have differently agreed values for this field.	Char	4
Ship To Code Description	English description of the Ship To Code value.	Char	16
Manufacturer Part Number (MPN)	Designated Manufacturer's Part Number (MPN) <i>Note:</i> Canada-supplied parts may have an MPN up to 34 characters in length ISS Contractor-supplied parts must have an MPN of 31 characters or less.	Char	34

³ This is a *functional* view of the data. A detailed schema including fields for parent/child structure, metadata to manage exchange with Industry, more specific types, etc. will be designed in a subsequent activity.

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BUC 3.51 Navy - Exchange
Part Request Report Data

Name	Definition	Type	Length
CAGE Code	Commercial And Government Entity (CAGE) code number that uniquely identifies the manufacturer of the part or product, sometimes produced under government contract.	Char	5
Part Description	Description of the Designated Manufacturer's Part Number	Char	30
Total Quantity Required	The total quantity required by materiel	Num	13,3
Quantity Committed	The total quantity reserved at demand location	Num	13,3
Unit of Issue	The Unit of Issue of the demanded quantity	Char	3
Transaction Date	Date demand was created	Datetime	
Requirement Date	Due date for part demanded	Datetime	
Work Order Number	CMMS internally generated unique identifier of a Work Order which item was issued to (as applicable).	Char	12
Reservation Number	CMMS reservation. Used for troubleshooting	Char	20

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4. Issues and Exceptions

None identified.

5. Business Process Flows

Refer to EIE Supply Materiel Business Process document, [Ref. 1] for diagrams that capture business process flow supported by this BUC.

6. Definitions, Acronyms, Abbreviations

Term	Description
BUC	Business Use Case
CAGE	Commercial And Government Entity
CMMS	Canada Maintenance Management System
CSS	Canada Supply System
DND	Department of National Defence
EDD	Estimated Delivery Date
EDE	Electronic Data Exchange
EIE	Electronic Information Exchange
HoP	Hand-Over Point
ISS	In Service Support
ISSC	In Service Support Contracting
MCP	Major Capital Project
MPN	Manufacturer's Part Number
PBC	Performance Based Contracting
PO	Purchase Order
PUK	Pack-Up Kit
SCMS	Supply Chain Management System
STTE	Special Tools and Test Equipment
WO	Work Order

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7. Document Control

7.1 Document History

Version Number	Description	Date
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