



Electronic Information Environment (EIE) Project

Business Use Case (BUC) BUC 7.2 Navy - Exchange Engineering Change Work Order Data

EIE Project

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The information being provided is to illustrate the model that exists for business processes and information exchange within the Performance Based Contracting (PBC) solution for the Department of National Defence. The information is provided to facilitate an understanding of the business architecture and the solution architecture that exist for the PBC program. The content is not intended to reflect the end state specifications for all of the PBC EIE related services.

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. The configuration management process has been endorsed by the PBC program. In this model the ISS Contractor is responsible for managing the Royal Canadian Navy ship class configuration in accordance with contractually agreed requirements. Canada shall ultimately approve the new or changed platform configuration and maintain current configuration through maintenance activities in the Canada Maintenance Management System (CMMS). In order for Canada and the ISS Contractor to fulfill their obligations under PBC, specific datasets must be exchanged between Canada and the ISS Contractor.

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

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

1.2 Purpose

The CMMS will be storing the allowable Ship Class configuration and maintaining the actual Ship Class configuration. Engineering change requests will be recorded in the CMMS to track implementation of the configuration changes required by an engineering change request. Exchange of engineering change related data involves new exchange business processes between CMMS and the ISS Contractor data consumers which complement already documented configuration management business processes.

This Business Use Case (BUC) describes the exchange of Engineering Change Work Order (WO) records between Canada and the ISS Contractor for a Navy Ship Class 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/>.

1.3 Intended Audience

The intended audience for this BUC includes:

- The ISS Contractor(s) who require detail of their business service-level interactions, benefits and obligations under PBC.
- All Canada personnel implementing PBC.
- Solution Architects who will define a Business Service Model for the business service(s) described here.
- Functional Testers who will use the BUC 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 O: Navy Configuration Management 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 O	Annex O – Navy Configuration Management Process Model

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2. BUC 7.2 Navy - Exchange Engineering Change Work Order Data

This BUC will identify processes and activities and define scenarios which apply to the engineering change work orders.

2.1 Overview

Identifier	BUC 7.2
Name	Navy - Exchange Engineering Change Work Order Data
Business goal	Send engineering change work order dataset to the ISS Contractor as necessary to allow the ISS Contractor to fulfill its obligations under PBC.
Stakeholders	Canada and the ISS Contractor(s)
Workflow/interaction	Exchange of engineering change work order dataset from Canada to the ISS Contractor as defined at multiple points in configuration management business processes. Reference [Ref. 1].
Processes	Information exchange is automated (system to system). The frequency of exchange is determined by Canada and each ISS Contractor. Some error scenarios may require manual intervention.
Context	Business Domain: Configuration Management Functional Area: Configuration Control <ul style="list-style-type: none"> Engineering Change Options Analysis Engineering Change Package Development Fleet Maintenance Facility (FMF) Taskings
Period of Time	The full lifecycle of the subject platform.
Description	<p>This use case describes the exchange of engineering change work order information between CMMS and the ISS Contractor in the context of PBC.</p> <p>The configuration control process receives and processes requests for engineering changes from Canada and the ISS Contractor's technical or operational authorities. In order to systematically track the engineering change request, an engineering change notification is created in the CMMS. If Canada is performing EC options analysis or implementation, the engineering change activity is captured in an EC work order. In accordance with the ISS contract, all EC work orders associated with the Platform will be transferred to the ISS Contractor in order to facilitate contractually agreed obligations.</p> <p>On a pre-determined, periodic basis, through the entire platform</p>

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lifecycle, Canada will transfer to the specific ISS Contractor, engineering change work order datasets, which are permitted by the business to be shared with the specific ISS Contractor.

2.2 Sub Processes and Activities Supported

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

2.3 Business Rules and Assumptions

1. The system shall ensure that the engineering change work order dataset for a platform is sent only to the ISS Contractor system which is properly authenticated and authorized to see Work Order dataset for that ship class.
2. As a result of Canada operational and security policies, the system may impose a latency (or delay) prior to releasing work order dataset to the ISS Contractor.
3. CMMS, as the system of record for actual configuration data, will determine when data can be released to the ISS Contractor and will initiate data transfer to the ISS Contractor. . The ISS Contractor remains the system of record for allowed configuration.
4. Any created, updated, or closed engineering change work order which is managed in a De-Centralized instance of CMMS aboard ship will not be released to the ISS Contractor until the De-Centralized CMMS instance is synchronized with the central CMMS. There may be delays in synchronization, resulting in delays in sending engineering change work order data to the ISS Contractor.

2.4 Actors

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

Role Name	Role Description / Responsibilities
Canada Authorized Person	<ul style="list-style-type: none"> Creates/closes engineering change work order.
CMMS system	<ul style="list-style-type: none"> Creates, processes and sends the work order dataset.
EDE	<ul style="list-style-type: none"> Transports and transforms the work order data.
ISS Contractor	<ul style="list-style-type: none"> Provides a system that will have the ability to: <ul style="list-style-type: none"> Accept and process engineering change work orders data sent from Canada, and Acceptance of the acknowledgement of data from Canada.

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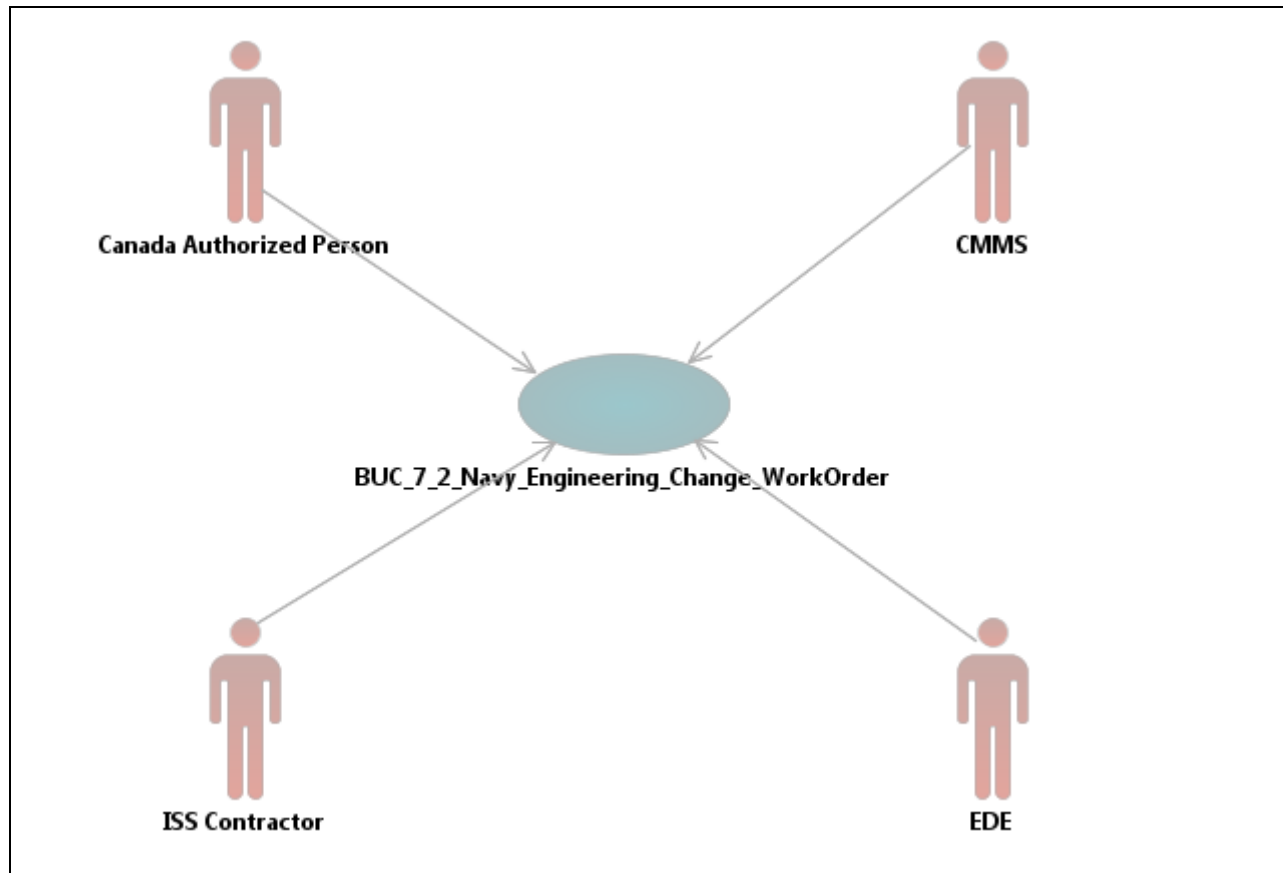


Figure 2-1 Navy - Exchange Engineering Change Work Order Data

2.5 Common Pre-Conditions

These apply to every scenario unless explicitly stated otherwise.

1. As per PBC, the ISS Contractor requires that the engineering change work order datasets be sent to the ISS Contractor Data Consumers/Systems.
2. Canada and the ISS Contractor have agreed upon work order dataset content and format (see [Functional Data Definition](#)).
3. Canada and the ISS Contractor have agreed upon work order data exchange mechanism.

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2.6 Common Post-Condition(s)

The following applies to every scenario unless explicitly stated otherwise.

1. Engineering change work order dataset has been received by the ISS Contractor and an acknowledgement has been received by Canada.

2.7 Common BUC Steps

Each scenario defined below includes the following common steps:

Common Steps	Step Description	Actor
Determine which work order records are to be sent to the ISS Contractor	CMMS determines which work order data is applicable for a given ISS Contractor, ship class, and business event and applies latency conditions to work order data to determine what is available for release to the ISS Contractor.	CMMS
Prepare and send work order data	CMMS creates and sends work order records as per input parameters and record definition provided by EDE.	CMMS
Convert work order data to the ISS Contractor format	EDE converts data to a format that has been adopted by Canada and the ISS Contractor.	EDE
Send work order data to the ISS Contractor	EDE sends work order dataset to the ISS Contractor exposed system, in accordance with transmission definition as per Canada EDE defined standards.	EDE
Acknowledge receipt of work order data	The ISS Contractor system sends an acknowledgement receipt to EDE for work order records.	ISS Contractor
Forward acknowledgement to CMMS	EDE forwards the acknowledgement receipt to CMMS.	EDE
Mark work order records as sent	CMMS updates its work order records as being delivered to the ISS Contractor.	CMMS
Send data integrity validation acknowledgement	ISS Contractor System conducts data integrity validation as per established business rules as agreed between Canada and the ISS Contractor. The ISS Contractor system sends acknowledgement to Canada EDE. Note: The ISS Contractor will send error information if the data fails integrity validation	ISS Contractor

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Common Steps	Step Description	Actor
Receive data integrity validation acknowledgement from the ISS Contractor	EDE receives the data integrity validation acknowledgement and dispatches the information to CMMS.	EDE
Mark work order records as being business acknowledged	CMMS updates its work order records as being business acknowledged by the ISS Contractor System.	CMMS

2.8 Scenarios²

In the following scenarios the pre-condition and trigger serve to uniquely identify the engineering change work order exchange in the context of a configuration management business process. This supports direct traceability between configuration management business processes and exchange use case scenarios.

Note: The numeric identifier that appears in square brackets besides each scenario name is an identifier that can be used to locate the event in the business process flow as per [Ref. 1].

² A scenario corresponds to a specific activity in a configuration management business process when a triggering event occurs which causes an engineering change work order dataset exchange. Picture the configuration management business process as proceeding horizontally through recognition of an engineering change situation, through fault isolation, initiation through completion of engineering change activities, certification of completion of engineering change implementation activity, possibly a trial, and reconciliation of the work order. Each exchange use case scenario corresponds to a vertical slice from a configuration management business process which results in an engineering change work order being transferred to the ISS Contractor.

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2.8.1 7.2.1 Work Order – Full [N1.4.3.2.1]

Scenario Name	7.2.1 Work Order – Full [N1.4.3.2.1]		
Business Process	<p>This scenario occurs in the following business processes:</p> <ul style="list-style-type: none"> Engineering Change Options Analysis Engineering Change Package Development FMF Taskings 		
Business Context	<p>The creation and technical and business closure of a work order as described in the following configuration management business processes will trigger sending the Full record of data to the ISS Contractor.</p> <p>Engineering Change Options Analysis</p> <ul style="list-style-type: none"> Upon completion and approval of the EC options analysis package, the work order for options analysis will be set to Technically Complete, then the work order and corresponding notification will be closed and related transactions sent to the ISS Contractor via the EDE. <p>Engineering Change Package Development</p> <ul style="list-style-type: none"> Upon completion and approval of the EC package, the WO for the development of the EC package will be set to Technically Complete. The WO and corresponding notification will then be closed and related transactions sent to the ISS Contractor via the EDE. <p>FMF Taskings</p> <ul style="list-style-type: none"> The FMF will create a Work Order for the change package development and release the notification and WO. All related transactions will be sent to the ISS Contractor via EDE. 		
Precondition(s)	See Common Pre-Conditions .		
Trigger event	Canada Authorized Person creates or technically closes the work order.		
Steps	Step Name	Step Description	Actor
	Create, technically close; business close work order	The Actor's action results in work order dataset being impacted.	Canada Authorized Person, CMMS
	Capture work order Full record in CMMS	The system will create a work order snapshot record, containing all available work order data as per the data map.	CMMS

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	Continue with Common BUC Steps
Postcondition(s)	See Common Post-Conditions .
Notes	

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2.8.2 7.2.2 Work Order – System Status [N1.4.3.2.2]

Scenario Name	7.2.2 Work Order – System Status [N1.4.3.2.2]		
Business Process	<p>This scenario occurs in the following business processes:</p> <ul style="list-style-type: none"> Engineering Change Options Analysis Engineering Change Package Development FMF Taskings 		
Business Context	<p>The creation, release and technical and business closure of a work order as described in the following configuration management business processes will trigger sending the System Status record of data to the ISS Contractor.</p> <p>Engineering Change Options Analysis</p> <ul style="list-style-type: none"> Upon completion and approval of the EC options analysis package the work order for options analysis will be set to Technically Complete, then the work order and corresponding notification will be closed and related transactions sent to the ISS Contractor via the EDE. <p>Engineering Change Package Development</p> <ul style="list-style-type: none"> Upon completion and approval of the EC package, the WO for the development of the EC package will be set to Technically Complete. The WO and corresponding notification will then be closed and related transactions sent to the ISS Contractor via the EDE. <p>FMF Taskings</p> <ul style="list-style-type: none"> The FMF will create a Work Order for the change package development and release the notification and WO for work performed by the FMF. All related transactions will be sent to the ISS Contractor via the EDE. 		
Precondition(s)	See Common Pre-Conditions .		
Trigger event	Canada Authorized Person creates, releases or technically closes the work order.		
Steps	Step Name	Step Description	Actor
	Create or update work order System Status in CMMS	The Actor chooses to assign or update the system status of a work order.	Canada Authorized Person, CMMS

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	Capture work order System Status record in CMMS	The system will create a work order System Status record, containing work order unique identifier and the associated system status value.	CMMS
	Continue with Common BUC Steps		
Postcondition(s)	See Common Post-Conditions .		
Notes			

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2.8.3 7.2.3 Work Order – Goods Issue [N1.4.3.2.6]

Scenario Name	7.2.3 Work Order – Goods Issue [N1.4.3.2.6]														
Business Process	<p>This scenario occurs in the following business processes:</p> <ul style="list-style-type: none">• Engineering Change Options Analysis• Engineering Change Package Development														
Business Context	<p>The technically completion and closure of a work order as described in the following configuration management business processes will trigger sending the Good Issue record of data to the ISS Contractor.</p> <p>Engineering Change Options Analysis</p> <ul style="list-style-type: none">• Upon completion and approval of the EC options analysis package, the work order for options analysis will be set to Technically Complete, then the work order and corresponding notification will be closed and related transactions sent to the ISS Contractor via the EDE. <p>Engineering Change Package Development</p> <ul style="list-style-type: none">• Upon completion and approval of the EC package, the WO for the development of the EC package will be set to Technically Complete. The WO and corresponding notification will then be closed and related transactions sent to the ISS Contractor via the EDE.														
Precondition(s)	See Common Pre-Conditions .														
Trigger event	<ul style="list-style-type: none">• Technically closure of work order.														
Steps	<table><tr><th>Step Name</th><th>Step Description</th><th>Actor</th></tr><tr><td>Close work order in CMMS</td><td>The Actor's action results in a technically closure of a work order.</td><td>Canada Authorized Person, CMMS</td></tr><tr><td>Capture in CMMS work order Goods Issue record</td><td>The system will collect and transmit existing information on the work order Goods Issue.</td><td>CMMS</td></tr><tr><td colspan="3">Continue with Common BUC Steps</td></tr></table>			Step Name	Step Description	Actor	Close work order in CMMS	The Actor's action results in a technically closure of a work order.	Canada Authorized Person, CMMS	Capture in CMMS work order Goods Issue record	The system will collect and transmit existing information on the work order Goods Issue.	CMMS	Continue with Common BUC Steps		
Step Name	Step Description	Actor													
Close work order in CMMS	The Actor's action results in a technically closure of a work order.	Canada Authorized Person, CMMS													
Capture in CMMS work order Goods Issue record	The system will collect and transmit existing information on the work order Goods Issue.	CMMS													
Continue with Common BUC Steps															
Postcondition(s)	See Common Post-Conditions .														
Notes															

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2.9 Information Requirements

Details on the data elements of an Engineering Change notification are provided in Section 3.

2.10 Special Requirements

None identified.

3. Functional Data Definition

The data elements which make up an engineering change work order 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 Data Entities Definition

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

Table 3-1 Data Entities Definition

Name	Description	Type	Length
Work Order Number	A unique identifier of a work order in CMMS. Always present	Char	12
Record Timestamp	The timestamp a work order snapshot is saved in the CMMS	Datetime	
External work order number	The ISS Contractor work order number	Char	64
Work Order Type	Defines a type of the work order. This field determines the usage and system workflow. Different work order types have different data layout, e.g. fields' definition, status profile. Values: Work Order Type (Example, N001 - Maintenance Order - Other Plant N005 - NP Configuration Change Order N006 - Capital Work Order)	Char	4
Work Order Type Description	The description of the work order Type.	Char	40
Work Order Short Description	Short description of the problem reported within the work order. It may come from the associated maintenance notification's short text.	Char	40
CAGE	Commercial And Government Entity (CAGE) code number of the manufacturer associated to the equipment	Char	5
MPN	Manufacturer Part Number Note: DND-supplied parts may have an MPN up to 34	Char	34

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Name	Description	Type	Length
	characters in length. Industry-supplied parts must have an MPN of 31 characters or less.		
Serial No	Manufacturer's Serial number of the part	Char	30
External FLOC Identifier	Functional Location. Equipment may or may not be installed in the functional location.	Char	30
FLOC description	Description of the External FLOC Identifier	Char	40
Assembly CAGE	The CAGE code of the MMR (assembly) in the work order (header level)	Char	5
Assembly MPN	The MPN of the MMR (assembly) in the work order (header level) Note: DND-supplied parts may have an MPN up to 34 characters in length. Industry-supplied parts must have an MPN of 31 characters or less.	Char	34
Frame ID	A reference point annotated on ship drawings used to denote major watertight sections within a ship upon a given deck. This field can be used to denote work that cannot be pinned down to a specific compartment.	Char	20
Compartment	An Identification Code used in reference drawings to identify the relative position of major and minor compartments within a ship. Values: <i>Compartment</i> (Example, 01DA = bridge 01DB0 = Chart room 01DC0 = Fire control equipment)	Char	5
Compartment Description	A description of the Compartment (Example, 'bridge')	Char	80
Customer reference number	This is a free text field with multiple uses. (Example, Populated with an Engineering Change Number during EC Changes.) This field will be automatically populated in the Order based on the value in the attached	Char	26

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Name	Description	Type	Length
	Notification (if one exists)		
Main Work Centre	A unique identifier of a work centre that has overall responsibility for all the work performed on a work order. This resides in the work order header.	Char	8
Main Work Centre Description	The description of the main work centre	Char	40
Class of Ship/ platform	The class that a ship belongs to	Char	3
Class of Ship/ platform description	The description of the Class of Ship/platform	Char	30
Revision	A revision is used to group together multiple, discrete maintenance objects (such as notifications or work orders) under a single identifier	Char	8
Description of Revision	A description of the revision	Char	40
PM Activity Type	Used to specify the type of work that is required. The list of valid PM activities depends on the work order type. Values: <i>PM Activity Type</i> (Example, N01 – Corrective, N02 – PM Arising, N04 – Safety) Note: The values of the PM Activity Type should be identical to the values within the Notification Activity Type of the corresponding Notification. While the activity type values are not mandatory for a notification, they are mandatory for a work order.	Char	3
PM Activity Type Description	Text description of the PM activity type.	Char	30
WO Long Text	Long text of the Work Order. For the PBC fleets, this entity may contain the references to Maintenance Manuals used in the work order. The references to maintenance	Char	2 GB

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Name	Description	Type	Length
	<p>manuals, if available, will be loaded from the Maintenance Task List into this field on the work order creation and it can be edited by the end user.</p> <p>Note: There will be no truncation of user-entered text.</p>		
Notification Identifier	A reference to the CMMS notification number from which the work order is generated.	Char	12
Work Order Start Date	Expected start date of maintenance activities.	Date	
Work Order Finish Date	Expected end date of maintenance activities	Date	
Scheduled Start Date	The scheduled start date for the entire work order	Datetime	
Scheduled Finish Date	The scheduled finish date for the entire work order	Datetime	
Actual Start Date	The actual start date for the work order	Datetime	
Actual Finish Date	The actual finish date for the work order	Datetime	
Total Order Quantity	<p>Quantity of the component required for the work order execution.</p> <p>Applies to backshop.</p>	Decimal	13.3
Priority	<p>Priority of the work being given by the planner/scheduler of the job.</p> <p>Values: <i>WO Priority</i></p> <p>(Example, High priority (code 101) for work order types N016, N017)</p>	Char	1
Priority Description	The description of the WO Priority Code.	Char	20
External Maintenance Plan Identifier	A unique the ISS Contractor's identifier of the preventive maintenance plan that is used to generate the WO. It will be blank if no maintenance plan is used, e.g., corrective maintenance WO.	Char	40
User Status Code	<p>More than one status can be selected per WO.</p> <p>Values: <i>User Status Code</i></p> <p>(Example,</p>	Char	4

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Name	Description	Type	Length
	SSWO Ship Staff Work Outstanding FILV First Level System AMAT Awaiting Material)		
User Status Description	The description of the WO User Status.	Char	30
User Status Start Date	Date and time the WO user status set event is logged in CMMS.	Datetime	
User Status Stop Date	Date and time the work order user status un-set event is logged in CMMS.	Datetime	
System Status Code	An attribute of a work order set by the CMMS. It is defined by the system workflow and it will change through the lifecycle of the WO. Values: System Status Code (Example, CRTD Created REL Released TECO Technically Completed CLSD Business Closed	Char	4
System Status Description	The description of the WO system status.	Char	30
System Status Start Date	Date and time the WO system status is set and saved in the CMMS	Datetime	
External Maintenance Task List Identifier	The ISS Contractor's identifier for a Task List. Note: External Maintenance Task List Identifier is also known as Orig_MTL_No, terminology used by CMMS.	Char	40
External Operation Identifier	The ISS Contractor's identifier for a Task List Operation (or combination operation / sub-operation)	Char	65
Operation Number	A unique identifier of an operation within a Work Order in the CMMS that is displayed to the user. The combination of Operation Number Sub-Operation Number is unique within the Work Order. Note: Operation Number is also known as OpAc, terminology used by CMMS.	Number	4

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BUC 7.2 Navy - Exchange
Engineering Change Work Order Data

Name	Description	Type	Length
Internal Operation ID	System generated unique identifier of an operation within a Work Order in the CMMS that cannot be changed	Number	8
Sub-Operation Number	An identifier of a sub-operation within an operation of the Work Order. Blank sub-operations are possible.	Number	4
Normal Duration	The planned duration of operation	Decimal	5.1
Number of resources	The number of resources planned for the activity	Integer	3
Planned Work	A number representing sum of amount of work planned per operation	Decimal	7.1
Planned Work UOM	Unit of measure for planned work	Char	3
Actual Start Date - Operation	The date that the work started for the operation	Datetime	
Actual Execution Finish Date - Operation	The date that the work was completed for the operation	Datetime	
Latest Planned Finish Date - Operation	The planned finish date for the operation	Datetime	
Latest Scheduled Finish Date - Operation	The planned finish date for the operation based on scheduling	Datetime	
Operation / Sub-operation Scheduled Start Date	The scheduled start date of the operation/sub-operation	Date	
Operation System Status Code	A status of an operation set by the CMMS. It is set by the system based on user actions.	Char	4
Operation System Status Description	The description of the WO Operation's System Status	Char	30
Operation System Status Start Date	Date and time the WO Operation system status set event is logged in CMMS.	Datetime	
Operation User Status Code	A user status manually set against an operation or sub-operation.	Char	4
Operation User Status Description	The description of the WO Operation's User Status.	Char	30

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BUC 7.2 Navy - Exchange
Engineering Change Work Order Data

Name	Description	Type	Length
Operation User Status Start Date	Date and time the WO user status set event is logged in CMMS.	Datetime	
Operation User Status Stop Date	Date and time the WO user status un-set event is logged in CMMS.	Datetime	
Performing Work Center	A unique identifier of a work center that is in overall charge when a maintenance task is carried out in the CMMS. A work center may be representing a trade group. The trades are mapped to generic Work Centers in the CMMS to fleet's specific Work Centers. The mapping has to be agreed between DND and the contractor.	Char	8
Performing Work Center Description	The description of the performing work center.	Char	20
Rectification Block Text <i>(Not applicable for the Navy)</i>	Text that may be entered when an operation / sub-operation is signed digitally.	Char	2 GB
Operation Short Text	Operation short text - may come from associated Task List or manually input.	Char	40
Operation Long Text	Long text associated to operation.	Char	2 GB
Planned Work for the activity	The planned work targeted for a specific activity. The Planned Work and the Actual Work share the same unit of measure (UOM)	Decimal	7.1
Actual Work	A number representing sum of amount of work done per operation. User entered value.	Decimal	13.3
Actual Work UOM	Unit of measure of the actual time of work performed per operation. (Example, HR (hour)).	Char	3
Actual Number of Resources	Actual Number of people who worked on the operation/sub-operation	INT	3
Component Item Number	A unique identifier of a component line item number against an operation. (CMMS will use the system's internal field "reservation item number" since the actual component's item number can be changed).	Char	4
Component Cage	Commercial And Government Entity (CAGE)	Char	5

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BUC 7.2 Navy - Exchange
Engineering Change Work Order Data

Name	Description	Type	Length
Code	code number that uniquely identifies the manufacturer of the part or product defined in the Operation; sometimes produced under government contract.		
Component MPN	<p>Manufacturer Part Number (MPN) of the component – a combination of numbers, letters, and symbols assigned by a designer, a manufacturer, or vendor to identify a specific part or item of materiel defined in the Operation.</p> <p>Note: DND-supplied parts may have an MPN up to 34 characters in length. Industry-supplied parts must have an MPN of 31 characters or less.</p>	Char	34
Component Description	Short description of the component.	Char	40
Component Long Text	<p>Free form text field that may be populated by a maintainer to capture additional information about the component.</p> <p>Note: There will be no truncation of user entered text.</p>	Char	2 GB
Required Quantity	Quantity of the component required for the operation execution.	Decimal	13.3
Component Unit of Measure	Unit of measure for the component.	Char	3
Goods Issue Cage Code	Commercial And Government Entity (CAGE) code number that uniquely identifies the manufacturer of the part or product issued to the Work Order or its Operation.	Char	5
Goods Issue MPN	<p>Manufacturer Part Number (MPN) of the part or product issued to the Work Order or its Operation.</p> <p>Note: DND-supplied parts may have an MPN up to 34 characters in length. Industry-supplied parts must have an MPN of 31 characters or less.</p>	Char	34

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BUC 7.2 Navy - Exchange
Engineering Change Work Order Data

Name	Description	Type	Length
Goods Issue Serial No	Serial Number of the part or product issued to the WO or its operation	Char	30
Goods Issue Date	Date the part or product was recorded as being issued to the Work Order or its operation.	Datetime	
Issued Quantity	Issued quantity of the part or product against the Work Order or its Operation.	Decimal	13.3
Issued Unit of Issue	Unit of issue for the issued part or product.	Char	3
Required STTE Cage Code	Commercial And Government Entity (CAGE) code number that uniquely identifies the manufacturer of the support and test equipment to be used on the WO.	Char	5
Required STTE MPN	Manufacturer Part Number (MPN) of the support and test equipment to be used on the WO – a combination of numbers, letters, and symbols assigned by a designer, a manufacturer, or vendor to identify a specific part or item of materiel. Note: DND-supplied parts may have an MPN up to 34 characters in length. Industry-supplied parts must have an MPN of 31 characters or less.	Char	34
Required STTE Part Description	Short Description of the required STTE.	Char	40
Required STTE Quantity	Quantity of the STTE required for the operation execution.	Decimal	13.3
Required STTE Unit of Issue	Unit of issue of required STTE	Char	3
Assigned STTE Cage Code	Commercial And Government Entity (CAGE) code number that uniquely identifies the manufacturer of the support and test equipment used on the WO.	Char	5
Assigned STTE MPN	Manufacturer Part Number (MPN) of the support and test equipment used on the WO – a combination of numbers, letters, and symbols assigned by a designer, a manufacturer, or vendor to identify a specific part or item of materiel.	Char	34

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BUC 7.2 Navy - Exchange
Engineering Change Work Order Data

Name	Description	Type	Length
	<p>Note:</p> <p>DND-supplied parts may have an MPN up to 34 characters in length.</p> <p>Industry-supplied parts must have an MPN of 31 characters or less.</p>		
Assigned STTE Quantity	Quantity of the STTE used for the operation execution.	Decimal	13.3
Assigned STTE Unit of Issue	Unit of issue of used STTE	Char	3
Assigned STTE Serial Number	A unique identifier of a special tools and test equipment used on the WO.	Char	30
Business Correlation ID	Canada CMMS identifier used with Business Sequence number to uniquely identify a business object sent to the ISS Contractor	Char	40
Business Sequence Number	Canada CMMS identifier used with Business Correlation ID to uniquely identify a business object sent to the ISS Contractor	Char	2
Reservation number	<p>A unique number assigned to the Work order for the purpose of tracking planned components.</p> <p>(A numeric with leading zeros)</p>	Integer	10
Source System	An identifier as to where an event occurred that resulted in a web service being generated. Can be used to determine, for example, which ship created a work order	Char	10

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4. Issues and Exceptions

None identified at this time.

5. Business Process Flows

Refer to EIE Configuration Management 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
DND	Department of National Defence
E&M	Engineering and Maintenance
EDE	Electronic Data Exchange
EIE	Electronic Information Environment
EMR	Equipment Master record
FMF	Fleet Maintenance Facility
ISS	In Service Support
MCP	Major Capital Project
MER	Master Equipment Record
MPN	Manufacturer Part Number
MTL	Maintenance Task List
PBC	Performance Based Contract
PMO	Project Management Office
STTE	Special Tools and Test Equipment
WO	Work Order

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7. Document Control

7.1 Document History

Revision Number	Description	Date
1.0	Release to the Navy RFP	16 September 2015

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