



Implementing Programme and Portfolio Management Using the Primavera Toolset

Configuration Research Phase

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Abstract

The Department of National Defence (DND) seeks to make use of an Enterprise-level Decision Support System (DSS) to assist with Departmental processes involving decisions based on information.

The Defence Integrated Management Environment (DIME) would have the potential to be an operational, department-wide toolset for accessing, defining and managing force development activities. DIME is composed of commercial off-the-shelf (COTS) software applications. Primavera, a COTS Project Management software application, is a main component of DIME that, when configured to meet the department's requirements, would accommodate multiple users and facilitate information sharing, data transfer, and incorporate scalable views of projects in the department, either at a department-wide level or within a specific class of projects.

Résumé

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Introduction

In recent years, rapid technological change has radically altered how people communicate with each other, manipulate data, and engage in project management. For DND and the Canadian Forces (CF), forming together a very large organization with distinct branches each with multiple projects, it is beneficial to have an Enterprise-level Decision Support System (DSS). This DSS would be a software tool intended for multiple users within the DND used to store and manipulate a wide range of data from current operations, readiness, and finances to future capabilities.

At any time, DND has a large number of projects in various phases of approval and execution. At the time of this writing, the Capability Investment Database (CID) lists 925 projects, of which 795 are ongoing and 130 are completed. With this undertaking of multiple projects, an Enterprise-level DSS could provide DND with a way to oversee Defence projects from a variety of viewpoints. For example, in the context of Institutional Managed Readiness, we may have a requirement for an up to date list of current or recently completed DND projects within a particular PRICIE¹ element. The data management capability could be used to provide DND with a rich set of facts when making strategic decisions and assist with programme and project reporting and governance.

The Defence Integrated Management Environment (DIME), composed of Commercial Off-the-shelf (COTS) software applications, will be an Enterprise-level, i.e. department-wide, DSS. DND has identified the COTS software application Primavera² as being a key piece of technology that could enable DND to increase its capacity to efficiently store, access and manipulate large amounts of data related to ongoing projects. Primavera is an Enterprise-level Project Management (PM) toolset presently used by many organizations worldwide. PMC³ Project Management Centre Inc., the Ottawa area representative for Primavera Systems Inc., currently provide Primavera administration services to DND.

Primavera makes use of a Database Management System (DBMS) such as Oracle⁴ for storing and retrieving data from a database. In the case of the DIME Program, the data generated from each project would be stored on a server within the Defence Wide Area Network (DWAN) by the DBMS.

¹ Personnel, Research and Development, Infrastructure and organization, Concepts, Doctrine and Collective Training, Information Management, and Equipment, Supplies and Services.

² Primavera software developed by Primavera Systems, Inc.

³ PMC (Project Management Centre) is the abbreviated company name for PMC Project Management Centre, Inc. in Ottawa, Ontario.

⁴ Oracle Relational Database allows a user to create, update and extract information from a database.

1.1 Aim

The aim of this paper is to describe the possible data sources and data linkages that need to be created in order to enable an Enterprise-level Project Management software application like Primavera to be responsive to the Department's Enterprise-level information requirements.

1.2 Background

DND/CF employed approximately 25000 Full-Time Equivalent (FTE) civilians and 67000 FTE regular military forces in 2007-08. The amount of data that is generated by this workforce is very large. A DND/CF accessible DSS would remove much of the burden involved with the current practice of sharing information primarily via email. In DND, with the possibility that information is necessary for the success of operations, it is critical that important information is available to the key people who need to make decisions.

The Army saw the importance of incorporating efficient data management/information sharing into their organization and tested a concept that would provide a tool to do both. They conducted an experiment testing integration of the Army Managed Readiness Information System and the Area Integrated Management Environment, via an Operational Data Store. This experiment (AMRIS/ODS/AIME [2]) was comprised of two scenarios during Out Year Campaign Plan/ Strategic Operations and Resource Direction (SORD) Task Assignment (Scenario 1) and In Year Campaign Plan/SORD Task Adjustment (Scenario 2). In addition, a third scenario, "Assign Task and receive update with missing data," was included, intending to test integration programming with an exceptional case.

AMRIS, the first component of the system in the experiment, consists of Project Management COTS software, Primavera Project Planner for the Enterprise (P3e). It provides the Strategic Capabilities: management functions, Planning and Scheduling, Resource Usage/Profiling, SORD Cost Tracking (See [1]). Other subcomponents of AMRIS include a Risk Analysis tool and a Document Repository.

The other component of the system is AIME, the external portion where information input pertaining to Operations status, or financial data, is required at multiple points in real-time by current operation staff. In the experiment, the inputs were made on a schedule. Then the test was to ensure the AMRIS side provided reliable information rolling-up status data.

1.3 Objective

The objective of the Defence Integrated Management Environment (DIME) project is to develop an operational, department-wide toolset for accessing, defining and managing force development activities within the context of the Department's mandate. Based on work done during the development of AMRIS and AIME, the

DIME program, if and when implemented over the next five years, would support users by providing an integrated management service accessible at multiple levels (by DND employees and CF members of all ranks) and across all Level 1 (L1) Environmental Chiefs of Staff (ECS)/ Groups of DND/CF.

Primavera COTS PM software application toolsets “provides multi-project, multi-user tools for enterprise-wide project management, providing comprehensive information on all projects in the enterprise, from executive-level summaries to detailed work assignments for each team member”⁵. With licenses already paid for by DND, Primavera is a first choice as the PM component of DIME to provide the portfolio and programme management capability. This study (see Section 1.2) shows that the P3e toolset will provide multiple uses within a DND context. In particular, based on the test results, it is clear that data-flow between the three major components of AIME is feasible. Although intended for wider use, the DIME project will employ the same system as in the AMRIS/ODS/AIME/ experiment.

Further analysis needs to be conducted before DIME can be expanded from a single Level 1 construct to a department-wide scope. An efficient and effective configuration of Primavera will make use of Project and Activity Codes as well as contain an Enterprise Project Structure (EPS) suitable to the DND project structure. The objective is that Primavera will provide users with a toolset for Programme and Portfolio Management as well as support Capability Management, Performance Management and an Institutional Managed Readiness capability.

This paper presents new research and analysis of ways to organize DND projects within the Enterprise Project Structure (EPS) of Primavera. The necessary components in the organization are the PRICIE elements, the Program Activity Architecture (PAA) framework, Defence Tasks (DTs), and Decisive Points & Objectives (DPs & Obj). Primavera will be configured to have these capacities for it to fulfill its role in DIME. Once configuration plans have been established for Primavera’s use in DIME, they will be sent to PMC so the administrators can begin implementing the plans.

⁵ Primavera Systems Inc. Primavera Version 5.0, Course 101, March 2006.

Project Management

Projects are an important tool for implementing change in an organization. The objective of a project is to produce a product or result, called the deliverable, within given constraints.

First, we introduce some PM concepts important to the research of implementing Programme and Portfolio management, including the Work Breakdown Structure (WBS) and Organization Breakdown Structure (OBS).

1.4 Definitions

Project Management is the science of producing the deliverable within the constraints as set out in the Project Charter. The *deliverable* can be a new product, a new procedure in an organization.

The *constraints* are usually time and resources, but it can sometimes be quality. The three form the edges of the 'constraint triangle'. This triangle is a pictorial description of the relationship of the three constraints. It states that in order to achieve a specified quality of deliverable, it takes a certain amount of time and resources. In addition, in order to fast track a project, more resources would be required, and/or quality would diminish.

A WBS is a detailed plan of the tasks involved to complete the project. It can be created either by all members of the team or by a smaller group during planning.

An OBS is a hierarchy of responsibility within a project or the Enterprise. The nodes can represent individuals or groups of individuals on a project team or larger sections of an organization within the department or both. In the case of projects, the OBS is a chain-of-command: Project Manager at the top and Team Leads responsible for individual groups of tasks lower.

1.5 Project Initiation

"Projects are initiated to accomplish Departmental Objectives." [3, p 4-1] The point of a project is to effect "a change in the manner in which the department conducts its business." [3, p 4-1]

The Initiation Phase consists of the analysis of a problem in the department, the weighing of the need to fix the problem versus just working around it, conducting basic options analysis including the business case, and producing the Project Implementation Plan (PIP) and a Project Charter.

The PIP includes all the details involved in the project: background, objectives, outline scope, etc. The Project Charter states the deliverable, the constraints and

assumptions. Also considered in this phase are quality management and risk management.

1.6 Project Planning

The planning phase of a project consists of taking the coarse granular roadmap outlined in the PIP and Charter and producing the detailed work outline. Members in the project team create a scope statement. “[This summarizes] the project team’s understanding of the justification for the project, along with the project objectives, major outputs, and/or deliverables.” [3, p 5-1]

In the planning phase, all the details of the project, from execution to closeout phases, are discussed and documented.

The WBS, one of the most important outputs of the planning phase, consists of the activities and tasks to complete during execution. This process also involves decomposition of tasks, sequencing, deciding what are the milestones in the project (major steps along the way to the completion of the deliverable), and finally examination of the critical path using a Gantt chart.

Another main item is to plan where to assign the resources that are available to accomplish the tasks. Without proper planning, a project is bound to fail. Without the work done in the planning phase, there would be very little to input into the Project Management software tools like Primavera. The Activities and tasks form the building blocks for all types of Projects, and therefore are the main source of information for the types of detailed reports that Primavera can produce.

1.7 Project Execution and Close Out

The next phase of any project is the Execution Phase. In this phase, the Project Team will produce the deliverables. Several common documents are output during this phase including progress reports, outstanding issues and exception reports. They produce an auditable trail of the shifts in the work that take place during execution, which is something known as ‘Scope Creep’. There is inevitably a certain amount of scope creep in any project since projects seldom proceed exactly as planned.

Finally, the Close Out Phase is an important part of sound project management. There will need to be a Final Report that explains to the client(s) the results. This phase of the project requires part of the Project Team to create a lessons learned document for future endeavours and a Post Project Audit for the Project Manager.

1.8 Projects within the Organization

Another part of project planning is choosing a project team. Depending on the organization, the team formation is in one of several different ways. There are three main types of organization from this viewpoint the functional organization, the

project organization and the matrix organization [3, pp 2-11 – 2-16]. The structure of an organization directly affects formation of Project Teams. For instance, one organization has its employees in either Customer Service or Finance. A project involving introducing new policies in client service would include employees from Customer Service on the team rather than Finance.

The functional organization consists of divisions that specialize in one area of work necessary for the fulfillment of that organization's missions. Here formation of the project team is on a needs basis: when tasks involved in the project require specific skill sets, then the Project Team will require someone from the division in the organization that provides that type of capability.

On the other hand, in a project type organization the organizational breakdown is in teams. These teams have projects of their own, for which they are fully responsible to complete with resources at hand, which are generally from within the team itself. The importance is that other team's members do not cross over to perform tasks or activities in another team's projects.

A matrix type organization is a combination of the first two types. In this type of organization, the breakdown into divisions is inherent. However, the project team members are within one division, but can be part of more than one team for projects. Matrix organizations "combine the best aspects of both pure forms (i.e. pure project and functional), as demonstrated by their relative strength." [3, p 2-13]. With respect to the projects it manages, DND is primarily a matrix type organization.

DND Projects and Activities

In this section, we describe DND project-related organizational structures that are important for the organization of projects. In the PM software Primavera, the Enterprise Project Structure (EPS) is the framework in which all the Enterprise projects are incorporated through what are termed “EPS nodes” [5]. The EPS nodes are roots of families of multiple projects and form mutually exclusive classes of projects at each level of the EPS. An unlimited number of EPS nodes each with an unlimited number of projects are allowed in the EPS. The projects themselves consist of activities and tasks. Although the project deliverable is the goal of the project, the activities and tasks have their own ‘deliverables’, which combine at the end of the Execution Phase to produce the project deliverable. Similarly, in DND, all activities and tasks have deliverable, which contribute to the projects that in turn help in fulfilling the Department’s mandate.

PRICIE elements are a DND categorization of projects into project portfolios. PRICIE elements will form a complete EPS within Primavera the toolset. This would allow the software to generate governance reports at individual portfolio levels.

The Program Activity Architecture (PAA) is the way DND groups the activities it does. Within each project, activities belong in categories, which are nodes in the PAA. This distinction of project activities allows a tracking of expenditures contained in each node of the PAA framework.

1.9 Program Activity Architecture

The PAA is a classification of DND activities. It identifies three strategic outcomes that contribute to the fulfillment of its Mission Statement: *To defend Canada and Canadian interests and values while contributing to international peace and security* [4].

There are five levels in the PAA framework. At the top is the Mission Statement under which all DND activity falls. The next level consists of three separate strategic outcomes that have associated general classes of activities at the subsequent level, the Program Activities level. The bottom two levels consist of ten Sub-Activities and 35 Sub-Sub-Activities, respectively. The PAA is the itemized division used for tracking, reporting and detailing expenditures within each element in the framework to the Treasury Board. The Report on Plans and Priorities (RPP) contains this breakdown of costs for the current year and is important to secure the funding required by the Department to accomplish these goals.

For an illustration of the main structure of the PAA, refer to Figure 1, and for the full diagram, see Figure 2. This framework does not change despite constant changes in the activity within each activity grouping.

DND PROGRAM ACTIVITY ARCHITECTURE

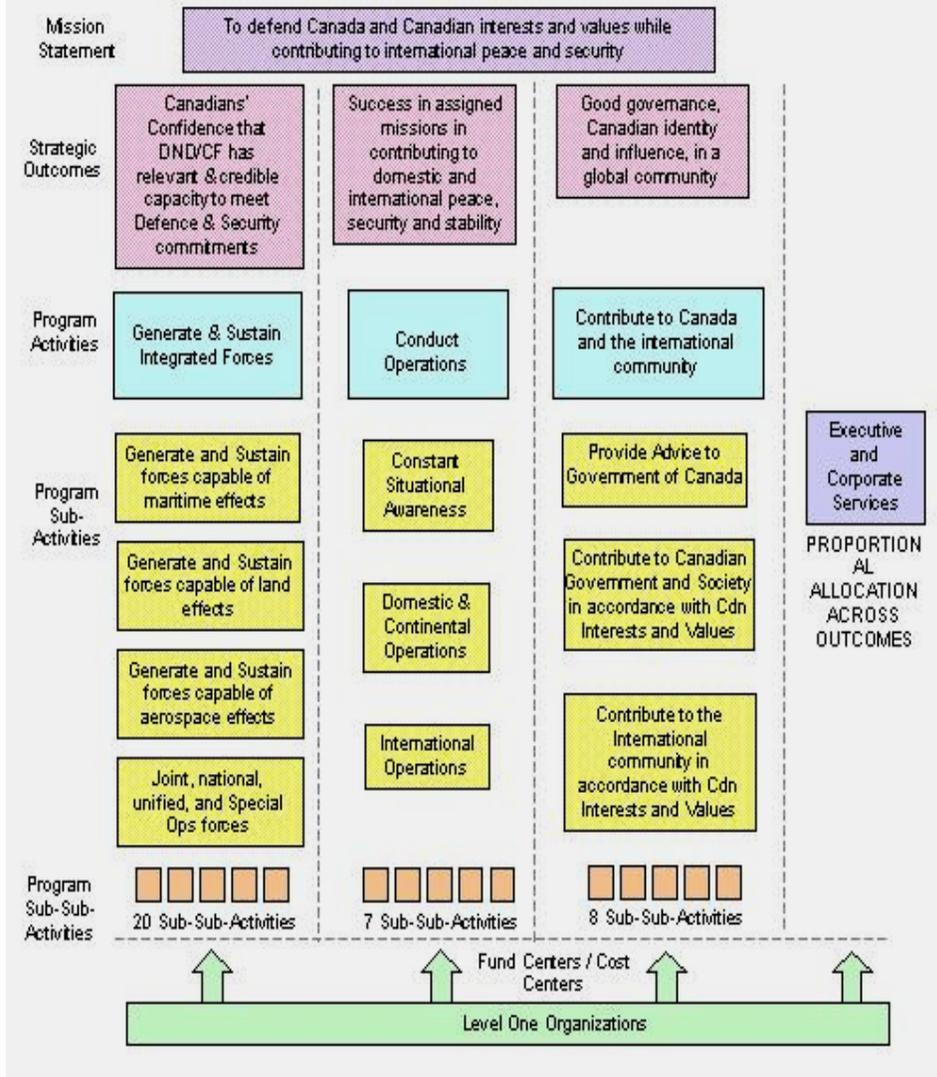
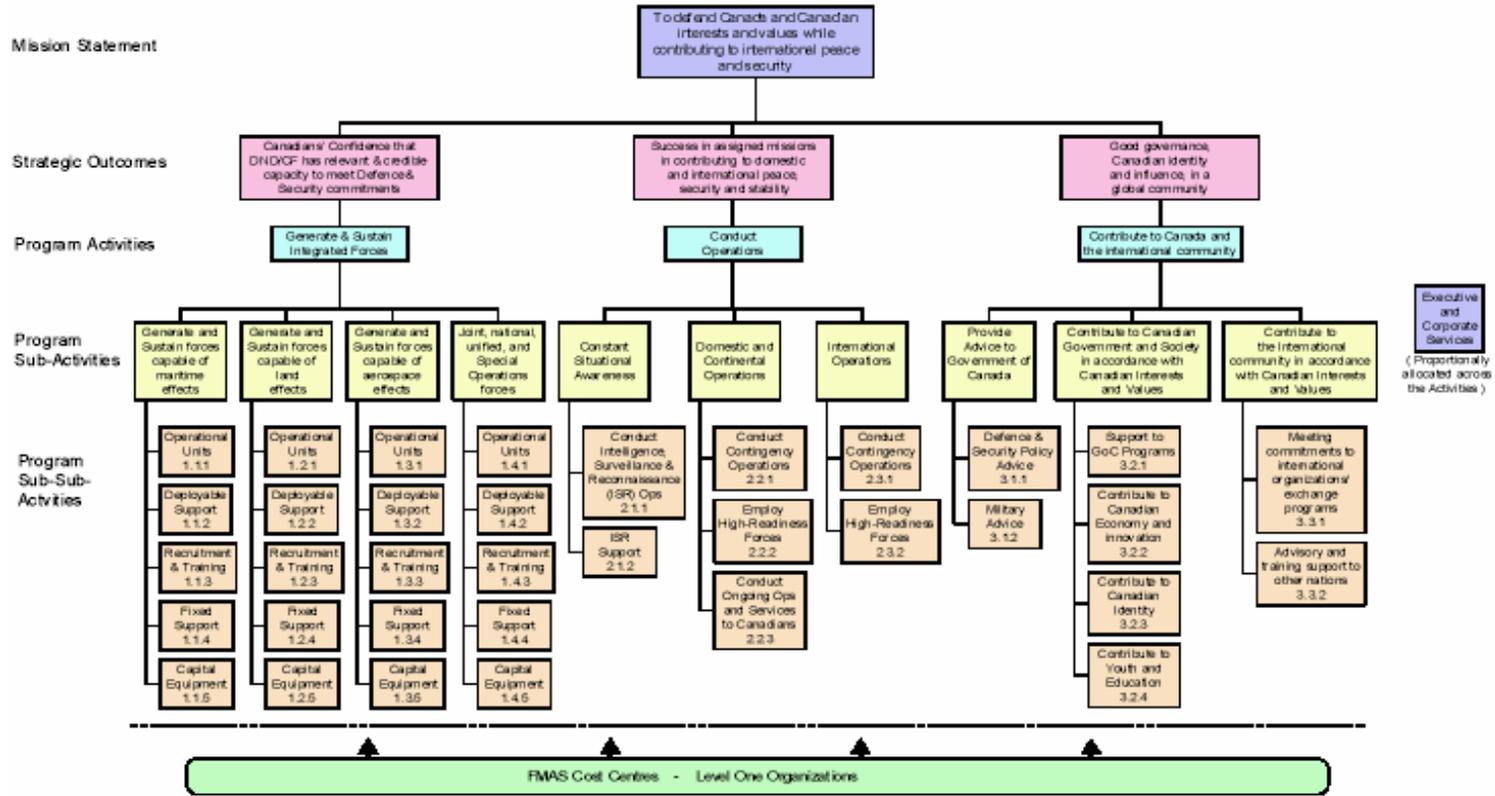


Figure 1. DND Program Activity Architecture

Source: [4]

Department of National Defence - Program Activity Architecture (PAA)



DDM 6 - 27 Jan 08

Figure 2. DND Program Activity Architecture with Program Sub-Sub-Activities

Source: [6]

1.10 PRICIE

The PRICIE elements form six portfolios of DND project types. PRICIE is Personnel, Research & Development, Infrastructure and organization, Concepts, Doctrine and Collective Training, Information Management, and Equipment, Supplies and Services⁶.

There are subcomponents within this definition. Two or more classes of project types make up each portfolio. There are 16 different classes of projects within the six elements. Table 1 shows what are the main and sub components. The EPS will consist of two levels: PRICIE elements, which are the portfolios of projects; and main and sub components, which are classes of projects within each portfolio.

Table 1. PRICIE elements

<i>Element</i>	<i>Main component</i>	<i>Sub component</i>	<i>Sub component</i>
P	Personnel	Leadership	Individual Training
R	Research & Development	Operational Research	CD & E*
I	Infrastructure	Environment	Organization
C	Concepts	Doctrine	Collective Training
I	Information Management	Information Technology	
E	Equipment	Support	

PRICIE components: groupings for capabilities in DND

*CD & E: Concept Development & Experimentation

⁶ <http://www.cfd-cdf.forces.gc.ca/sites/page-eng.asp?page=89>

1.11 Defence Tasks and Decisive Points & Objectives

In PM, tasks form part of the project activities required to complete the deliverable. In DND, all activities consist of tasks. Defence Tasks, like the tasks in PM project activities, are part of the DND activities. Defence Tasks (DTs), found in the Defence Plan (DP), are one level under the lowest level of the PAA, which consists of the Program sub-sub-activities. In DND/CF, there are 227 DTs listed in the DP Online [7] at the time of this writing.

The DTs consist of codes such as DT1-1-2-67 and corresponding short title, in this case C4ISR Support. They indicate the responsible L1 ECS / Group, and priority, for instance, in the form of a 'must complete by' timeframe. The first numbers in the codes, i.e. those that are one digit, depend on the node of the PAA, in this case, 1-1-2 corresponds to the Program Sub-Sub-Activity node 1.1.2, Deployable Support, within the Generate and Sustain Forces capable of Maritime effects Sub-Activity (see Figure 2). The final numbers in the codes, i.e. those that are more than one digit, depend on the individual L1 ECS / Group Objective.

- DT1-4-1-2305 International Ops JTF HQ Capability  CEFCOM

Description. Maintain the capability to provide, in support of international operations, a Joint Task Force Headquarters; and in support of domestic and international operations the command element in support of Disaster Assistance Response Team (DART) international operations.

Readiness Level	Within
Advance C4I support forces.	21 days.
Main C4I support forces.	90 days.
Sustainability Level	Up to
Low-level operations.	180 days.
Combat operations.	60 days.

Figure 3. Defence Task (From DP Online)

Decisive Points & Objectives (DPs & Obj) are the individual L1 ECS / Group's lists of tasks. A DT may require one or more of the tasks from that group which is responsible. The following example helps to illustrate the concept.

In the Army SORD 2007 Decisive Point 3: Transform Doctrine, Structures & Capabilities. Within Decisive Point 3 is Obj 3A: Produce concept for Army of Tomorrow (AoT) within the CF vision for Land Ops. There are two sub-objectives

involved for achieving this Obj: Army's position for Strategy 2025; and Develop a Force Employment Concept for the AoT. These all contribute to the deliverable DP 3: Transform Doctrine, Structures & Capabilities.

Together, the PAA, DTs, DPs & Obj form a system for grouping and coding DND Activities. They also form a hierarchical chain from top to bottom for family groupings of Activities. The tree structure of the PAA provides natural points where all Project Activities below roll up. The PRICIE portfolio elements are a system for grouping DND Projects. With these elements considered, in Primavera, a configuration system is proposed in the next Section.

2. Configuring the Primavera Toolset

For Primavera to successfully be integrated in the DIME programme we need to delineate the composition in Primavera of the EPS, suggest potential conventions in naming project and activity codes with direct associations with the PRICIE elements, DND PAA (see Figure 1 and Figure 2), DTs, and DPs & Obj (see Section 0). With an optimal configuration, Primavera's navigation menus will provide users of DIME relevant information on DND Projects within given search parameters, such as PRICIE project portfolio element. In the following sections, we explore the most likely alignments.

2.1 Primavera Codes

The Primavera codes system consists of the Project, Activity and Resource Codes and serves typically as a way to attach labels to Projects and Activities to help to classify and group them according to their characteristics. An administrator programs the characteristics during configuration. The User **selects** a value from a list of choices to **assign** to each Code.

In Table 2, the rows with font in bold name the Codes, and the subsequent rows list the possible values that can be assigned for DND Program Activity Architecture. In this PAA setting, for code values that would apply in general over the scope of a project, assigning a Project Code would be the appropriate method. For a value which corresponds to some activities of a project, not all, then each activity would be assigned the corresponding Activity Code.

2.1.1 Project and Activity Codes and PAA

The Program Activity Architecture consists of a Mission Statement, a Strategic Outcome and Program Activity, Program Sub-Activities, and finally Program Sub-Sub-Activities. Project Codes would allow Primavera to group DND projects by these characteristics, using the names of the Nodes in the PAA as the possible values to assign to each. While a Project Code would almost certainly apply at the Program Activity level, it may be that more detail is required at the finer levels. If no Project Code were assigned to the PAA at a given sub-activity of sub-sub-activity level, then an Activity Code would need to be assigned.

For example at the Program Sub-Activity Code level, the user could select "1.1 Generate and Sustain forces capable of maritime effects" as the value for the Program Sub-Activity Project Code in Primavera or select several different Activity Code values provided they are assigned to specific activities within the project. If all activities within the project would have the same Activity Code value, then it would be more appropriate simply to assign that Project Code value.

Table 2. Primavera Project and Activity Codes and PAA Code Values

PROJECT CODES	ACTIVITY CODES
Code: Program Activities (Project Codes)	
Generate & Sustain Integrated Forces (1) Conduct Operations (2) Contribute to Canada and the International community (3)	
Code: Program Sub-Activities (either Project or Activity Codes)	
Generate and Sustain forces capable of maritime effects (1.1) Generate and Sustain forces capable of land effects (1.2) Generate and Sustain forces capable of aerospace effects (1.3) Joint, national, unified, and Special Ops forces (1.4) Constant Situational Awareness (2.1) Domestic & Continental Operations (2.2) International Operations (2.3) Provide Advice to GoC (3.1) Contribute to Can Gov't and Society (3.2) Contribute to the Int'l community (3.3)	
Code: Program Sub-Sub-Activities (either Project or Activity Codes) Note, only numeric values are given here for simplification	
1.1.1; 1.1.2; 1.1.3; 1.1.4; 1.1.5; 1.2.1; 1.2.2; 1.2.3; 1.2.4; 1.2.5; 1.3.1; 1.3.2; 1.3.3; 1.3.4; 1.3.5; 1.4.1; 1.4.2; 1.4.3; 1.4.4; 1.4.5; 2.1.1; 2.1.2; 2.2.1; 2.2.2; 2.2.3; 2.3.1; 2.3.2; 3.1.1; 3.1.2; 3.2.1; 3.2.2; 3.2.3; 3.2.4; 3.3.1; 3.3.2 (If project is specific enough, then one value may be assigned.)	

Codes and associated values for the DND PAA.

2.1.2 Activity Codes and DTs, DPs & Objs

Since there are many different DTs, DPs and Obj involved in Projects, the use of Project Codes for these is not required. Instead, simply using Activity Codes will suffice.

This method is useful when the Project Activities input into DIME are specific by these traits. For instance, if an Activity were too big and consisted of either several DTs or DPs, it would be preferable to break that activity into more than one so Activity Code values could be assigned.

In the case of Obj however, if the Activity accomplished more than one Obj, and splitting the Activity was impossible, then it would be impossible to classify the Activity by Obj, but only one level up at the DPs. It is not necessary in Primavera to assign code values to a code, and this is the option to take in such a situation.

With such number of possible values for the DT Activity Code alone, we give one example of the values that would result given a PAA Project Code value corresponding to the Program Sub-Activity level 3.1 Provide Advice to GoC. In such a case, the logical possible values for a PAA Activity Code at the Program Sub-Sub-Activity level are 3.1.1 and 3.1.2. Next, [6] gives probable values to assign DT Activity Code shown in Table 3.

Table 3. DT Activity Code Values under PAA 3.1

3.1.1.117	Communications Assistance to OGDs (responsible ADM[PA])
3.1.1.209	Strategic Resource Management Advice (responsible VCDS)
3.1.1.208	Public Affairs Advice (responsible ADM[PA])
3.1.1.210	Defence Policy Development (responsible ADM[Pol])
3.1.1.222	Policy Governance (responsible ADM[Pol])
3.1.2.206	Defence and Security Advice (responsible CMS, CLS, CAS, CanadaCOM, CEFCOM, CANSOFCOM, CANOSCOM, SJS, ADM[IM] CMP, ADM[HR Civ], ADM[Mat], ADM[S&T], ADM[IE], ADM[Fin CS], ADM[Pol], VCDS)

Activity Code Values and descriptions by Defence Task under PAA 3.1 Provide Advice to GoC.

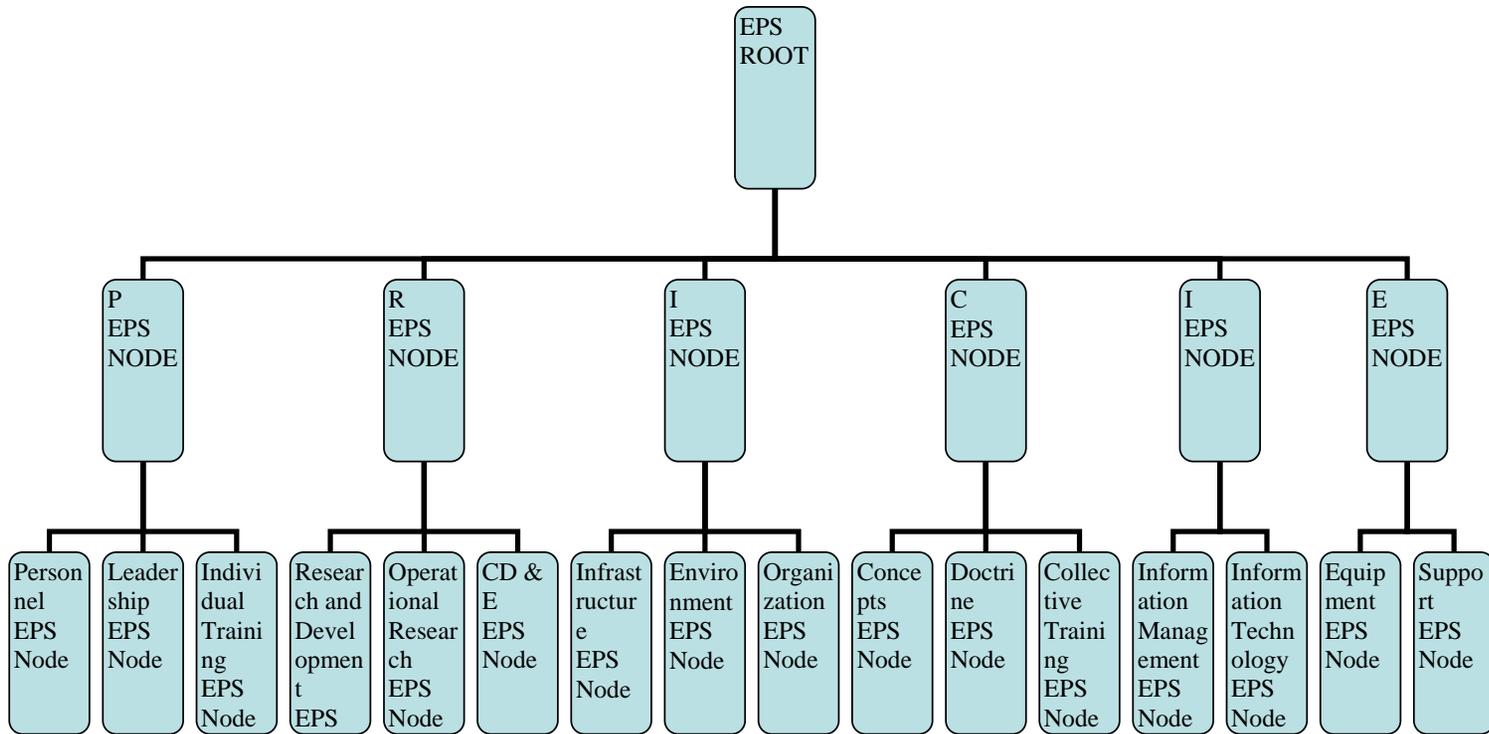
2.2 EPS and PRICIE

Forming an EPS structure following PRICIE elements will provide a good way to organize DND projects in Primavera. Each PRICIE element has several sub-components to it, thus providing one more level to the hierarchical classification.

The root of the EPS, which contains all DND projects, is the parent to each EPS Node. Following PRICIE, there would be six EPS nodes at the second Level in the Enterprise Project Structure, and 16 EPS nodes at the third Level. This structure is represented in Table 4. Projects either can be placed in the second or third levels, denoting that they affect either an entire PRICIE element, or one specific component.

This EPS structure would help to accomplish the goal of configuration of Primavera. DND projects will fit neatly (with no overlap) into each of these 16 PRICIE element classifications, making sorting through the projects simple and intuitive for the Users.

Table 4. EPS Structure following PRICIE Elements



In the EPS structure, Projects may be placed at any level. This means that a specific project may be placed in the third level, indicating it applies specifically to that component within the PRICIE elements. For e.g. a research and development project that had no operational research or CD&E could be placed in the research and development EPS Node. Otherwise, it would have to go in the parent node.

3. Summary

This report described the DIME project that consisted of a COTS software application Primavera for its portfolio and programme management functions. The report described the data linkages that could be used to incorporate DND's various project structure into Primavera. We proposed methods for aligning Primavera EPS, Project and Activity Codes with the PRICIE portfolio elements, DTs, DPs & Obj constructs within DND. That is a possible configuration for Primavera toolsets. In order for DIME to be successfully introduced to the DND/CF workplace, a working configuration such as the one described in this report is required.

Table 5 shows how the proposed configuration allows users to assign project values. The Program administrator is first responsible for inputting the Code names (i.e. PAA program activities and Defence Tasks, etc.) and the corresponding possible values, which has been discussed in Section 2.1. Section 2.2 discussed the overarching framework, which, incorporated as the Primavera EPS structure, would support the placement of DND/CF projects.

The benefits of incorporating these constructs in the Primavera EPS and coding systems are in the resulting ways to view Project data. By viewing data by one means or another, different uses are possible. For instance, the Financial Managerial Accounting System (FMAS) may use DIME to update its own systems, improving the ability of this system to be up to date. The PAA is the construct for this type of reporting. In Capability-Based Planning (CBP), the EPS project view could provide reports on the status of projects in each PRICIE component.

Table 5. Usage of Primavera Codes

	Program Activity	Program Sub-Activity	Program Sub-Sub-Activity	Defence Tasks	Decisive Points	Objectives
Project Codes						
Activity Codes						
Legend:		Codes applicable always			Codes not applicable	
		Codes applicable sometimes				

Types of Codes and opportunity to apply them.

Other benefits that are available with the Primavera configurations are the streamlining of work reporting. Each activity report would be in the same system. These reports become available to others within the Department as soon as the DBMS stores the data in the database. This could help improve cohesion between the L1 ECS/ Groups.

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List of symbols/abbreviations/acronyms/initialisms

DND	Department of National Defence
DSS	Decision Support System
DIME	Defence Integrated Management Environment
COTS	Commercial Off The Shelf
CF	Canadian Forces
CID	Capability Investment Database
PRICIE	Personnel, Research and Development, Infrastructure and organization, Concepts, Doctrine and Collective Training, Information Management, and Equipment, Supplies and Services
PMC	PMC Project Management Centre, Inc.
DBMS	Database Management System
DWAN	Defence Wide Area Network
FTEs	Full-Time Equivalents
AMRIS	Army Managed Readiness Information System
ODS	Operational Data Store
AIME	Area Integrated Management Environment
SORD	Strategic Operations and Resource Direction
P3e	Primavera Project Planner for the Enterprise
ECS	Environmental Chiefs of Staff
PM	Project Management
EPS	Enterprise Project Structure

PAA	Program Activity Architecture
DTs	Defence Tasks
DPs	Decisive Points
Obj	Objective(s)
WBS	Work Breakdown Structure
OBS	Organizational Breakdown Structure
PIP	Project Implementation Plan
RPP	Reports on Plans and Priorities
DP	Defence Plan
C4ISR	Command, Control, Communications and Computers, Intelligence, Surveillance, Reconnaissance
L1	Level 1
JTF	Joint Task Force
HQ	Head Quarters
CEFCOM	Canadian Expeditionary Force Command
DART	Disaster Assistance Response Team
AoT	Army of Tomorrow
GoC	Government of Canada
FMAS	Financial Managerial Accounting System
CBP	Capability-Based Planning
MRRS	Management, Resources and Results Structure
VCDS	Vice-Chief of Defence Staff
CMS	Chief of the Maritime Staff
CLS	Chief of the Land Staff
CAS	Chief of the Air Staff

CanadaCOM	Canada Command
CANSOFCOM	Canadian Special Operations Forces Command
CANOSCOM	Canadian Operation Support Command
SJS	Strategic Joint Staff
ADM[IM]	Assistant Deputy Minister (Information Management)
CMP	Chief of Military Personnel
ADM[HR Civ]	ADM (Human Resources Civilian)
ADM[Mat]	ADM (Materiel)
ADM[S&T]	ADM (Science and Technology)
ADM[IE]	ADM (Infrastructure and Environment)
ADM[Fin CS]	ADM (Finance and Corporate Services)
ADM[Pol]	ADM (Policy)
ADM[PA]	ADM (Public Affairs)
CD & E	Concept Development & Experimentation

Glossary

Defence Tasks	The activities performed by the CF to help achieve its missions.
Decisive Points	Categories for projects undertaken by the CF.
Objectives	In the context of projects undertaken by the CF, these are missions which are required to fulfill the requirements of the projects. These belong to their particular categories within Decisive Points.
Project Code	Projects created in Primavera can be assigned Project Code values, helping specify where the projects fit in the Department enterprise.
Activity Code	The same as project code but to be assigned to activities within the projects in Primavera.
Resource Code	A similar code assigned to the resources available for projects. They can be used to specify the type of resources available on a given project.
Work Breakdown Structure	A detailed view of the activities involved in a project.
Organizational Breakdown Structure	A detailed view of the chain-of-command within an organization.
Enterprise Project Structure	The framework within which projects are input into Primavera. It is desirable that this structure reflects the true nature of the Department project organization.
Gantt Chart	A chart of all Project activities in a calendar showing activity interdependencies.

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The Department of National Defence (DND) seeks to make use of an Enterprise-level Decision Support System (DSS) to assist with Departmental processes involving decisions based on information.

The Defence Integrated Management Environment (DIME) would have the potential to be an operational, department-wide toolset for accessing, defining and managing force development activities. DIME is composed of commercial off-the-shelf (COTS) software applications. Primavera, a COTS Project Management software application, is a main component of DIME that, when configured to meet the department's requirements, would accommodate multiple users and facilitate information sharing, data transfer, and incorporate scalable views of projects in the department, either at a department-wide level or within a specific class of projects.

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