

OV-5 : Operational Activity Model

This document defines the mapping between the DODAF OV-5 Operational Activity Model and the ISO 10303 AP233 Systems Engineering information model. This mapping is defined for the purpose of enabling data exchange between computer applications supporting the ISO AP233 standard and those supporting the US DoDAF CADM format, specifically CADM 1.01 Draft for Review dated 11 July 2003.

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1. Introduction

The OV-5 Operational Activity Model Product Description in the DoDAF Volume II: Product Descriptions document defined OV-5 as follows.

The Operational Activity Model describes the operations that are normally conducted in the course of achieving a mission or a business goal. It describes capabilities, operational activities (or tasks), input and output (I/O) flows between activities, and I/O flows to/from activities that are outside the scope of the architecture. High-level operational activities should trace to (are decompositions of) a Business Area, an Internal Line of Business, and/or a Business Sub-Function as published in OMB's Business Reference Model.

DoDAF Volume II also describes the use of various types of diagrams for representing OV-5 content.

2. OV-5 Concepts

An Operational Activity Model may be used to represent the following concepts.

Activity Decomposition or Hierarchy

represented by parent-child relationships between Operational Activities

Doctrine

represented as controls (or guard conditions) in OV-5

Diagram

graphical representations of operational activities that may be part of a Model

Facility

represented as mechanisms (i.e. system nodes that house the systems) that support operational activities

Flow Connector

a relationship into or out of an Operational Activity (with a possibly External link) that may also be an Input, Output, Control or Mechanism as defined in IDEF0 diagrams

Leadership

represented by relating a mechanism in OV-5 to an operational node in OV-2 to organization, organization type or leadership human roles in OV-4

Materiel

represented as systems that are mechanisms supporting operational activities in OV-5

Model

an Operational Activity Model from a specific Viewpoint of which Diagrams may be constituents

Operational Activity

an activity (or task)

Organization

represented via operational nodes which can be shown as mechanisms (or annotations to the activities) in OV-5

Personnel

represented by relating a mechanism in OV-5 to an operational node in OV-2 to organization, organization type or human roles in OV-4

Training

a human role that embodies a required skill set represented as an operational node related to OV-5 operational activities

3. OV-5 AP233 Mapping Issues

Warning:

At the time this document was written, AP233 was still undergoing development.

This section describes the issues in mapping between OV-5 Operational Activity Models and ISO AP233 as of the date of publication of this document. These issues may be addressed in future work by the DoDAF Working Group, the ISO AP233 development team or others.

1. DoDAF process activities are mapped into AP233 activity method. This should be considered in more detail as AP233 is completed. As more complex kinds of activity-related support is added to AP233 (e.g. for SysML and EFFBDs), it may be that a new concept is added to AP233 that is more appropriate for the DoDAF views in question.
2. Process activities have a version identifier that cannot currently be mapped into AP233 activity method which does not have versions.
3. Several CADM attributes such as PROC_ACTV_SR CDC_TX and AMPA_DESCR_TX are text descriptions of various aspects of CADM concepts. It is possible to map these as string-valued properties that are classified as **SOURCE DOCUMENT TEXT**, etc. but this needs more study. For example, extended text might better be represented as a generated text document file defined as an AP233 Document.
4. How to support the complex CADM Caveated Security Classes needs to be investigated further.
5. The mapping for PROC_ACTVTY_TSK / PATSK_ROLE_CD for value 02 = SUPPORTS TASK does not work if the CADM Process Activity is not mapped to an

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AP233 Task_method. In AP233 an AP233 Activity method does not typically support an AP233 Task method. This needs further investigation.

4. Mapping OV-5 CADM XML to AP233 XML

This section defines the mapping from the CADM XML representation of OV-5 Operational Activity Models into an ISO AP233 XML representation of that same data. The mapping is defined at the detailed level of the XML elements and attributes themselves as it is aimed at implementors. See AP233 for more information on the AP233 XML Schema and the AP233 EXPRESS schema.

Please review the rules for AP233 XML data production as they are applicable to all implementations.

4.1. OV-5 Mapping

This section describes the mapping for the CADM OV-5 itself.

See Example ACTV_MDL_SPEC for example CADM XML Operational Activity Model data.

The following table documents the CADM Activity Model Specification mapping.

CADM XML Element(s)	AP233 XML Element(s) or Attributes(s)
ACTV_MDL_SPEC	A kind of CADM CADM Document.
ACTV_MDL_SPEC / ACT_MDL_SPC_DOC_ID and ACTV_MDL_IA_ID	A Document_definition_relationship, see AP233 Documents, with child element Relating_document_definition referring to the AP233 document definition for the Activity Model and child element Related_document_definition referring to the AP233 document definition for the Activity Model Specification. The Document_definition_relationship is classified as ACTIVITY MODEL SPECIFICATION STRUCTURE SPECIFICATION .
ACTV_MDL_SPEC / NODE_TREE_DOC_ID	Not currently mapped.

Table 1: Within the ACTV_MDL_SPEC_TBL CADM XML Element

4.2. Activity Model and Information Asset Mapping

For OV-5, the CADM Activity Model and Information Asset are mapped as specified in the

SV-4 and related Activity Model Mapping.

See Example ACTV_MODEL for example CADM XML Activity Model data.

4.3. Activity Model Process Activity Mapping

This section describes the mapping for Activity Model Process Activity.

See Example ACTV_MDL_PROC_ACTV for example CADM XML Activity Model Process Activity data.

The following table documents the Activity Model Process Activity mapping.

CADM XML Element(s)	AP233 XML Element(s) or Attributes(s)
ACTV_MDL_PROC_ACTV	When the PROC_ACTVTY / PROC_ACTV_CAT_CD involved in the relationship has the following values, maps as specified in SV-4 Activity Model Process Activity and otherwise maps as specified in the remainder of this table. <ul style="list-style-type: none"> • 01 = DATA STORE • 02 = SYSTEM FUNCTION • 03 = START STATE/CONDITION • 04 = END STATE/CONDITION
ACTV_MDL_PROC_ACTV / PA_ID and ACTV_MDL_IA_ID	A Applied_activity_method_assignment classified as Activity Model Occurrence where the Items child element refers to the Document_definition representing the CADM Activity Model and the Assigned_activity_method refers to the Activity_method representing the CADM Process Activity.
ACTV_MDL_PROC_ACTV / ACT_MDL_PRC_CAT_CD	A classification of the Applied_activity_method_assignment representing the CADM Activity Model Process Activity depending on the following values <ul style="list-style-type: none"> • 1 = D--DECOMPOSABLE ACTIVITY maps as ACTIVITY-MODEL-PROCESS-ACTIVITY CATEGORY DECOMPOSABLE ACTIVITY • 2 = T--TRANSACTION REQUIREMENT ACTIVITY maps as ACTIVITY-MODEL-PROCESS-ACTIVITY CATEGORY TRANSACTION REQUIREMENT ACTIVITY • 8 = NOT SPECIFIED maps as

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	<p>ACTIVITY-MODEL-PROCESS-ACTIVITY CATEGORY NOT SPECIFIED</p> <ul style="list-style-type: none"> 9 = NOT KNOWN maps as ACTIVITY-MODEL-PROCESS-ACTIVITY CATEGORY NOT KNOWN
ACTV_MDL_PROC_ACTV / ACT_MDL_PRC_CMP_CD	<p>A classification of the <code>Applied_activity_method_assignment</code> representing the CADM Activity Model Process Activity depending on the following values</p> <ul style="list-style-type: none"> 1 = A--AGGREGATE ACTIVITY maps as ACTIVITY-MODEL-PROCESS-ACTIVITY COMPOSITION AGGREGATE ACTIVITY 2 = D--DISCRETE ACTIVITY maps as ACTIVITY-MODEL-PROCESS-ACTIVITY COMPOSITION DISCRETE ACTIVITY 8 = NOT SPECIFIED maps as ACTIVITY-MODEL-PROCESS-ACTIVITY COMPOSITION NOT SPECIFIED 9 = NOT KNOWN maps as ACTIVITY-MODEL-PROCESS-ACTIVITY COMPOSITION NOT KNOWN
ACTV_MDL_PROC_ACTV / AMPA_DESCR_TX	Not currently mapped. See OV-5 Issues
ACTV_MDL_PROC_ACTV / AMPA_DIAG_NM	<p>An assigned identifier of the <code>Applied_activity_method_assignment</code> classified as a ACTIVITY-MODEL-PROCESS-ACTIVITY DIAGRAM NAME</p>
ACTV_MDL_PROC_ACTV / AMPA_EST_CST_AMT	<p>An assigned property for the <code>Applied_activity_method_assignment</code> the assignment is classified as Estimated Cost with the value represented as a <code>Numerical_item_with_unit</code> classified as Monetary Value and a Unit of US Dollars.</p>
ACTV_MDL_PROC_ACTV / AMPA_LEAF_CD	<p>A classification of the <code>Applied_activity_method_assignment</code> representing the CADM Activity Model Process Activity depending on the following values</p> <ul style="list-style-type: none"> 1 = YES, PROCESS-ACTIVITY IS A LEAF NODE maps as ACTIVITY-MODEL-PROCESS-ACTIVITY LEAF 2 = NO, PROCESS-ACTIVITY IS NOT A LEAF NODE maps as ACTIVITY-MODEL-PROCESS-ACTIVITY

	<p>NOT LEAF</p> <ul style="list-style-type: none"> 8 = NOT SPECIFIED maps as ACTIVITY-MODEL-PROCESS-ACTIVITY LEAF NOT SPECIFIED 9 = NOT KNOWN. maps as ACTIVITY-MODEL-PROCESS-ACTIVITY LEAF NOT KNOWN
ACTV_MDL_PROC_ACTV / AMPA_REF_ID_TX	An assigned identifier of the Applied_activity_method_assignment classified as a ACTIVITY-MODEL-PROCESS-ACTIVITY REFERENCE IDENTIFICATION TEXT
ACTV_MDL_PROC_ACTV / ACT_MDL_DTL_REF_ID	An assigned identifier of the Applied_activity_method_assignment classified as a ACTIVITY-MODEL-PROCESS-ACTIVITY SOURCE DETAIL REFERENCE IDENTIFIER

Table 1: Within the ACTV_MDL_PROC_ACTV_TBL CADM XML Element

4.4. Process Activity Mapping

This section describes the mapping for the CADM Process Activity concept and relationships.

See Example PROC_ACTVTY for example CADM XML Process Activity data.

CADM XML Element(s)	AP233 Representation
PROC_ACTVTY	Depends on the PROC_ACTV_CAT_CD, see below.
PROC_ACTVTY / PROC_ACTV_CAT_CD	<p>When the following values, maps as specified in SV-4</p> <ul style="list-style-type: none"> 01 = DATA STORE 02 = SYSTEM FUNCTION 03 = START STATE/CONDITION 04 = END STATE/CONDITION <p>When one of the following values, maps to a typical activity (see AP233 activity approach.). A classification of the AP233 concept representing the CADM Process Activity as follows depending on the value.</p> <ul style="list-style-type: none"> 08 = NOT SPECIFIED maps to not classified 09 = NOT KNOWN 05 = PROCESS-ACTIVITY

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PROC_ACTVTY / PA_ID	The assigned identifier of the Activity_method
PROC_ACTVTY / PA_NM	The assigned identifier classified as a Name of the Activity_method
PROC_ACTVTY / PA_VERS_ID	Not currently mapped. See OV-5 Issues
PROC_ACTVTY / PAFNTL_PROC_ID	An Activity_method_realization linking the Activity_method representing the Process Activity to the Task_method representing the Functional Process. The Activity_method child element refers to the Activity_method and the Realized_by refers to the Task_method.
PROC_ACTVTY / DOC_ID	An AP233 Document assigned to the AP233 element representing the Process-Activity.
PROC_ACTVTY / CSC_ID	tbd element
PROC_ACTVTY / PA_DEF_TX	The Description child element containing text.
PROC_ACTVTY / SC_CD	The assignment of a Security_classification to the AP233 concept representing the specific CADM Process Activity with child element Security_level containing the text (not the number) of the security class.
PROC_ACTVTY / PRC_ACT_SCP_DSC_TX	The Purpose child element containing text.
PROC_ACTVTY / PROC_ACTV_SRCDC_TX	Not currently mapped. See OV-5 Issues
PROC_ACTVTY / PA_CREAT_CALDT	See Date. The Date_or_date_time_assignment element child Items element refers to the Activity_method representing the PROC_ACTVTY and the Date_or_date_time_assignment is classified as an Date_actual_creation .
PROC_ACTVTY / PROC_ACTV_VALID_CD	An Approval_status classified with one of the following text values depending on the code. The status is assigned to the Activity_method. <ul style="list-style-type: none"> • 01 = APPROVED • 02 = PROPOSED • 03 = DRAFT

	<ul style="list-style-type: none"> • 04 = CONCEPTUAL • 05 = DISAPPROVED • 06 = ARCHIVED • 08 = NOT SPECIFIED maps to not classified. • 09 = NOT KNOWN
PROC_ACTVTY / PROC_ACTV_HIER_TX	The assigned identifier classified as a ACTIVITY HIERARCHY TEXT of the Activity_method
PROC_ACTVTY / PROC_ACTV_HIER_NM	The assigned identifier classified as a ACTIVITY HIERARCHY NAME of the Activity_method
PROC_ACTVTY / PA_ALT_ID	Identifier of the Activity_method (see AP233 id approach.) classified as ALTERNATE IDENTIFIER

Table 1: Within the PROC_ACTVTY_TBL CADM XML Element

See Example ACTV_MDL_PA_ASSOC for example CADM XML Activity Model Process Activity Association data.

This table describes the mapping for the CADM Activity Model Process Activity Association concept.

CADM XML Element(s)	AP233 Representation
ACTV_MDL_PA_ASSOC	Activity_method_relationship element representing a super/sub-activity relationship and is classified as an Activity decomposition
ACTV_MDL_PA_ASSOC / ACTV_MDL_IA_ID	
ACTV_MDL_PA_ASSOC / AMPAA_CREA_CALDT	See Date. The Date_or_date_time_assignment element child Items element refers to the Activity_method_relationship representing the ACTV_MDL_PA_ASSOC and the Date_or_date_time_assignment is classified as an Date actual creation .
ACTV_MDL_PA_ASSOC / AMPAA_REV_CALDT	See Date. The Date_or_date_time_assignment element child Items element refers to the Activity_method_relationship representing the ACTV_MDL_PA_ASSOC and the Date_or_date_time_assignment is classified as an Date actual revision .
ACTV_MDL_PA_ASSOC / AMPAA_ROL_DSCR_TX	Activity_method_relationship child Description containing the text.

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ACTV_MDL_PA_ASSOC / AMPAA_SUBSEQ_ID	
ACTV_MDL_PA_ASSOC / ORD_PA_ID	Activity_method_relationship / Relating_method / Activity_method element ref attribute referring to the super-activity
ACTV_MDL_PA_ASSOC / SUB_PA_ID	Activity_method_relationship / Related_method / Activity_method element ref attribute referring to the sub-activity

Table 2: Within the ACTV_MDL_PA_ASSOC_TBL CADM XML Element

See Example FPA_PROCESS for example CADM XML Process Activity Functional Process data.

This table describes the mapping for the CADM Process Activity Functional Process concept.

CADM XML Element(s)	AP233 Representation
FPA_PROCESS	A Task_method as described in AP233 Tasks.
FPA_PROCESS / PAFNTL_PROC_ID	The assigned identifier of the Task_method
FPA_PROCESS / FP_FCTN_ID	Not currently mapped.
FPA_PROCESS / PAFNTL_PROC_DFN_TX	The Purpose child element containing text.
FPA_PROCESS / PAFNTL_PROC_NM	The assigned identifier classified as a Name of the Task_method
FPA_PROCESS / PAFNTL_PROC_NR_ID	The assigned identifier classified as a Number Identifier of the Task_method

Table 3: Within the FPA_PROCESS_TBL CADM XML Element

See Example PROC_ACTVTY_ASSOC for example CADM XML Process Activity Association data.

This table describes the mapping for the CADM Process Activity Association concept.

CADM XML Element(s)	AP233 Representation
PROC_ACTVTY_ASSOC	Activity_method_relationship element representing a the relationship and is classified based on the PAA_ROLE_CD below.
PROC_ACTVTY_ASSOC / CHILD_PA_ID	Activity_method_relationship / Relating_method / Activity_method element ref attribute referring to the super-activity

PROC_ACTVTY_ASSOC / PAR_PA_ID	Activity_method_relationship / Related_method / Activity_method element ref attribute referring to the sub-activity
PROC_ACTVTY_ASSOC / PAA_ID	Not used in mapping.
PROC_ACTVTY_ASSOC / PAA_ROLE_CD	<p>An AP233 classification of the Activity_method_relationship based on the value as follows.</p> <ul style="list-style-type: none"> • when 01 maps as IS DERIVED FROM • when 02 maps as IS IDENTICAL TO • when 03 maps as REPLACED • when 04 maps as IS PART OF • when 05 maps as DIRECTLY SUPPORTS • when 06 maps as INDIRECTLY SUPPORTS • when 07 maps as FULLY IMPLEMENTS • when 08 maps as PROCESS ACTIVITY ASSOC ROLE NOT SPECIFIED • when 09 maps as PROCESS ACTIVITY ASSOC ROLE NOT KNOWN • when 10 maps as IMPLEMENTS (REALIZES)

Table 4: Within the PROC_ACTVTY_ASSOC_TBL CADM XML Element

4.4.1. Process Activity Task Mapping

See Example PROC_ACTVTY_TSK for example CADM XML Process Activity Task data.

This table describes the mapping for the CADM Process Activity Task relationship concept.

CADM XML Element(s)	AP233 Representation
PROC_ACTVTY_TSK	Maps depending on the PATSK_ROLE_CD as specified below.
PROC_ACTVTY_TSK / PATSK_ROLE_CD	<p>Maps and is classified depending on the value as follows. When any of the following, maps to Activity_method_realization between the Activity_method representing the CADM Process Activity and the Task_method representing the CADM Task (see AP233 Activity). The Activity_method_realization is also classified as specified below.</p> <ul style="list-style-type: none"> • 01 = IS SUPPORTED BY TASK maps to classified with TASK ROLE SUPPORTED BY TASK • 03 = IS A SURROGATE FOR (REPRESENTS)

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	<p>maps to classified with TASK ROLE IS SURROGATE</p> <ul style="list-style-type: none"> 98 = NOT SPECIFIED maps to classified with TASK ROLE NOT SPECIFIED 99 = NOT KNOWN maps to classified with TASK ROLE NOT KNOWN <p>When any of the following, maps to Activity_method_realization between the Task_method representing the CADM Process Activity and the Task_method representing the CADM Task (see AP233 Activity). The Activity_method_realization is also classified as specified below.</p> <ul style="list-style-type: none"> 02 = SUPPORTS TASK maps classified with TASK ROLE SUPPORTS TASK (see OV-5 Issues).
PROC_ACTVTY_TSK / PA_TSK_ID	The assigned identifier
PROC_ACTVTY_TSK / ACTV_MDL_IA_ID	An assignment of the AP233 concept representing the identified Information Asset (e.g. AP233 Document or AP233 Assignment) to the Activity_method_realization.
PROC_ACTVTY_TSK / PA_ID and TSK_ID	The PA_ID maps to the Activity_method child of the Activity_method_realization and the TSK_ID maps to the Realized_by child element.

Table 1: Within the PROC_ACTVTY_TSK_TBL CADM XML Element

4.5. Information Elements Mapping

This section describes the mapping for the CADM Information Element concept.

See Example INFO_ELEM for example CADM XML Information Element data.

CADM XML Element(s)	AP233 Representation
INFO_ELEM	A Document (see AP233 Document) with related Document_version both classified as an Information Element . All names and identifiers are assigned to the Document except for those specific to the version of the Information Element which are assigned to the Document_version
INFO_ELEM / IE_ID	The assigned identifier of the AP233 concept

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	representing the CADM Information Element.
INFO_ELEM / CSC_ID	See OV-5 Issues
INFO_ELEM / DEVEL_ORG_ID	An Organization_or_person_in_organization_assignment classified as the DEVELOPING_ORGANIZATION , relating an Organization with the AP233 concept representing the CADM Information Element. See AP233 Organization and AP233 Assignment.
INFO_ELEM / DOC_ID	An AP233 Document assigned to the AP233 element representing the Information Element.
INFO_ELEM / IE_ALT_ID	The assigned identifier, classified as ALTERNATE IDENTIFIER , of the AP233 concept representing the CADM Information Element.
INFO_ELEM / IE_CREA_CALDT	An AP233 Date related to the element representing the Information Element classified as a DATE_CREATION
INFO_ELEM / IE_DEF_TX	The Description child element of the Document.
INFO_ELEM / IE_NM	The assigned identifier, classified as Name , of the AP233 concept representing the CADM Information Element.
INFO_ELEM / IE_REV_CALDT	An AP233 Date related to the element representing the Information Element classified as a DATE_REVISION
INFO_ELEM / IE_SHRT_NM	The assigned identifier, classified as SHORT NAME , of the AP233 concept representing the CADM Information Element.
INFO_ELEM / IE_VALID_STA_CD	An Approval_status classified with one of the following text values depending on the code. The status is assigned to the Document and/or the Document_version. <ul style="list-style-type: none"> • 01 = APPROVED • 02 = PROPOSED • 03 = DRAFT • 04 = CONCEPTUAL • 05 = DISAPPROVED • 06 = ARCHIVED

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	<ul style="list-style-type: none"> 08 = NOT SPECIFIED maps to not classified. 09 = NOT KNOWN
INFO_ELEM / IE_VERS_ID	The assigned identifier of the Document_version.
INFO_ELEM / MSR_UNT_CD	Units are handled using AP233 External Class.
INFO_ELEM / SC_CD	The assignment of a Security_classification to the AP233 concept representing the specific CADM Information Element in question with child element Security_level containing the text (not the number).

Table 1: Within the INFO_ELEM_TBL CADM XML Element

This section describes the mapping for the CADM Activity Model Information Element Role concept.

See Example ACTV_MDL_IE_ROLE for example CADM XML Activity Model Information Element Role data.

CADM XML Element(s)	AP233 Representation
ACTV_MDL_IE_ROLE	Maps to an Applied_activity_method_assignment relating the Activity_method representing the Process Activity with the AP233 representation of the Information Element associated the the Process Activity.
ACTV_MDL_IE_ROLE / AMIER_ID	The assigned identifier of the Applied_activity_method_assignment.
ACTV_MDL_IE_ROLE / ACTV_MDL_IA_ID	Not yet mapped.
ACTV_MDL_IE_ROLE / IE_ID and PA_ID	The Applied_activity_method_assignment child element Items referring to the AP233 element representing the Information Element and Assigned_activity_method referring to the Activity_method representing the Process Activity respectively.
ACTV_MDL_IE_ROLE / AMIER_DESCR_TX	tbd element
ACTV_MDL_IE_ROLE / AMIER_TY_CD	Applied_activity_method_assignment element is classified depending on value as follows: 1 = Activity Input , 2 = Activity Output ,

	3 = Activity Control and 4 = Activity Mechanism
ACTV_MDL_IE_ROLE / AMIER_EXT_CD	A classification of the Applied_activity_method_assignment depending on the following values. <ul style="list-style-type: none"> • 1 = EXTERNAL maps to EXTERNAL INFORMATION FLOW • 2 = NOT EXTERNAL maps to NOT EXTERNAL INFORMATION FLOW • 8 = NOT SPECIFIED maps to not classified • 9 = NOT KNOWN maps to INFORMATION FLOW NOT KNOWN
ACTV_MDL_IE_ROLE / AMIER_MOD_CALDT	An AP233 Date assigned to the Applied_activity_method_assignment classified as a DATE_MODIFICATION .

Table 2: Within the ACTV_MDL_IE_ROLE_TBL CADM XML Element

5. Example OV-5 CADM XML Data

This section contains example OV-5 CADM XML data.

5.1. Example ACTV_MDL_SPEC

```
<DOC>
  <DOC_ID>316</DOC_ID>
  <DOC_NM>TRP Context Diagram</DOC_NM>
  <SC_CD>14</SC_CD>
  <CSC_ID>20000001</CSC_ID>
  <TIME_FRAME_PRD_ID>20102341</TIME_FRAME_PRD_ID>
  <DOC_APP_CALDT>20031126</DOC_APP_CALDT>
  <DOC_ABBRV_NM>TRP Context</DOC_ABBRV_NM>
  <DOC_ARCHPROD_TY_CD>1</DOC_ARCHPROD_TY_CD>
  <DOC_ORIGINATOR_NM>AIP PHASE II TEAM</DOC_ORIGINATOR_NM>
  <DOC_CRTN_CALDT>20031203</DOC_CRTN_CALDT>
  <DOC_DESC_TX>OV-5 CONTEXT DIAGRAM FOR TRP INTEGRATED
ARCHITECTURE</DOC_DESC_TX>
  <DOC_NOTATION_TX>IDEF0</DOC_NOTATION_TX>
  <DOC_CAT_CD>J</DOC_CAT_CD>
  <DOC_PROMULG_CD>998</DOC_PROMULG_CD>
  <DOC_RMK_TX>VALIDATED FOR AIPP PHASE II UNDER OASD(NII)
GUIDANCE</DOC_RMK_TX>
  <DOC_TMPRL_SCP_CD>3</DOC_TMPRL_SCP_CD>
  <DOC_VER_ID>VERSION 1.0</DOC_VER_ID>
  <DCMNT_RNG_CD>B</DCMNT_RNG_CD>
  <DOC_URL_TX>NONE PROVIDED</DOC_URL_TX>
  <DOC_TY_CD>98</DOC_TY_CD>
  <DOC_PUB_DT>20031203</DOC_PUB_DT>
</DOC>
```

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```
<ACTV_MDL_SPEC>
  <ACT_MDL_SPC_DOC_ID>316</ACT_MDL_SPC_DOC_ID>
  <ACTV_MDL_IA_ID>20000012</ACTV_MDL_IA_ID>
  <NODE_TREE_DOC_ID>322</NODE_TREE_DOC_ID>
</ACTV_MDL_SPEC>
```

5.2. Example ACTV_MODEL

```
<INFO_ASSET>
  <IA_ID>20000012</IA_ID>
  <OWNER_ORG_ID>23000077</OWNER_ORG_ID>
  <INF_ASST_VRS_ID>1</INF_ASST_VRS_ID>
  <SC_CD>14</SC_CD>
  <INF_ASSET_NM>Context Diagram for Generation of Tactical Reconnaissance
Plans</INF_ASSET_NM>
  <MAINT_ORG_ID>23000077</MAINT_ORG_ID>
  <IA_TY_CD>13</IA_TY_CD>
  <STEWARD_ORG_ID>23000077</STEWARD_ORG_ID>
  <INF_ASST_DFN_TX>Context model for how to generate tactical
reconnaissance plans for
      a specific Army mission or plan.
  </INF_ASST_DFN_TX>
  <INF_ASST_CMT_TX>First iteration of the context diagram for the TRP
integrated architecture</INF_ASST_CMT_TX>
  <IA_STD_ST_CD>2</IA_STD_ST_CD>
  <IA_STD_ST_CALDT>20031212</IA_STD_ST_CALDT>
  <IA_STD_AUT_CD>2</IA_STD_AUT_CD>
  <INF_AST_ACRYNM_TX>TRPGCD</INF_AST_ACRYNM_TX>
  <IA_REUSABLE_CD>8</IA_REUSABLE_CD>
  <INF_AST_SHT_NM>TRP CONTEXT DIAGRAM</INF_AST_SHT_NM>
</INFO_ASSET>
<ACTV_MODEL>
  <ACTV_MDL_IA_ID>20000012</ACTV_MDL_IA_ID>
  <ACTV_MDL_SCP_TX>SUPPORTS THE GENERATION OF AN INTEGRATED ARCHITECTURE AS
DEFINED
      IN DODAF VERSION 1.0
  </ACTV_MDL_SCP_TX>
  <ACTV_MDL_TNS_CD>T</ACTV_MDL_TNS_CD>
  <ACTV_MDL_VWPT_TX>VIEW POINT OF SYSTEM PLANNER</ACTV_MDL_VWPT_TX>
  <ACTV_MDL_AUT_NM>FRANCISCO LOAIZA</ACTV_MDL_AUT_NM>
  <ACTV_MDL_CALDT>20031214</ACTV_MDL_CALDT>
  <ACT_MDL_DV_ST_TX>FIRST ITERATION FOR AIP PHASE II</ACT_MDL_DV_ST_TX>
  <ACTV_MDL_TY_CD>1</ACTV_MDL_TY_CD>
  <ACTV_MDL_VALDTN_CD>2</ACTV_MDL_VALDTN_CD>
  <ACT_MDL_ORG_CTX_TX>THE SPONSORING ORGANIZATION IS OASD(NII). THE PRIMARY
FOCUS IS
      ARCHITECTURE DATA INTEROPERABILITY
  </ACT_MDL_ORG_CTX_TX>
</ACTV_MODEL>
```

5.3. Example ACTV_MDL_PROC_ACTV

```
<ACTV_MDL_PROC_ACTV>
  <PA_ID>20019311</PA_ID>
```

```

<ACTV_MDL_IA_ID>20000012</ACTV_MDL_IA_ID>
<AMPA_EST_CST_AMT>200000</AMPA_EST_CST_AMT>
<ACT_MDL_PRC_CAT_CD>1</ACT_MDL_PRC_CAT_CD>
<AMPA_DESCR_TX>NONE PROVIDED</AMPA_DESCR_TX>
<ACT_MDL_PRC_CMP_CD>8</ACT_MDL_PRC_CMP_CD>
<AMPA_REF_ID_TX>NONE PROVIDED</AMPA_REF_ID_TX>
<AMPA_LEAF_CD>8</AMPA_LEAF_CD>
<AMPA_DIAG_NM>TRP CONTEXT DIAGRAM</AMPA_DIAG_NM>
</ACTV_MDL_PROC_ACTV>

```

5.4. Example PROC_ACTVTY

```

<PROC_ACTVTY>
  <PA_ID>20019311</PA_ID>
  <PA_VERS_ID>1</PA_VERS_ID>
  <PAFNTL_PROC_ID>20007001</PAFNTL_PROC_ID>
  <PA_NM>External Source for model Inputs</PA_NM>
  <DOC_ID>323</DOC_ID>
  <CSC_ID>20000001</CSC_ID>
  <PA_DEF_TX>External source for inputs into the activity model</PA_DEF_TX>
  <SC_CD>14</SC_CD>
  <PRC_ACT_SCP_DSC_TX>NONE PROVIDED</PRC_ACT_SCP_DSC_TX>
  <PROC_ACTV_SRCDC_TX>AIP PHASE II TEAM</PROC_ACTV_SRCDC_TX>
  <PA_CREAT_CALDT>20031214</PA_CREAT_CALDT>
  <PROC_ACTV_CAT_CD>8</PROC_ACTV_CAT_CD>
  <PROC_ACTV_VALID_CD>3</PROC_ACTV_VALID_CD>
  <PROC_ACTV_HIER_TX>NONE PROVIDED</PROC_ACTV_HIER_TX>
  <PROC_ACTV_HIER_NM>TRP</PROC_ACTV_HIER_NM>
  <PA_ALT_ID>NONE PROVIDED</PA_ALT_ID>
</PROC_ACTVTY>

```

5.5. Example ACTV_MDL_PA_ASSOC

```

<ACTV_MDL_PA_ASSOC>
  <ACTV_MDL_IA_ID>20000018</ACTV_MDL_IA_ID>
  <ORD_PA_ID>20019315</ORD_PA_ID>
  <SUB_PA_ID>20019316</SUB_PA_ID>
  <AMPAA_SUBSEQ_ID>1</AMPAA_SUBSEQ_ID>
  <AMPAA_CREA_CALDT>20031212</AMPAA_CREA_CALDT>
  <AMPAA_REV_CALDT>20031214</AMPAA_REV_CALDT>
  <AMPAA_ROL_DSCR_TX>Subactivity</AMPAA_ROL_DSCR_TX>
</ACTV_MDL_PA_ASSOC>
<ACTV_MDL_PA_ASSOC>
  <ACTV_MDL_IA_ID>20000018</ACTV_MDL_IA_ID>
  <ORD_PA_ID>20019315</ORD_PA_ID>
  <SUB_PA_ID>20019317</SUB_PA_ID>
  <AMPAA_SUBSEQ_ID>2</AMPAA_SUBSEQ_ID>
  <AMPAA_CREA_CALDT>20031212</AMPAA_CREA_CALDT>
  <AMPAA_REV_CALDT>20031214</AMPAA_REV_CALDT>
  <AMPAA_ROL_DSCR_TX>Subactivity</AMPAA_ROL_DSCR_TX>
</ACTV_MDL_PA_ASSOC>

```

5.6. Example FPA_PROCESS

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```
<FPA_PROCESS>
  <PAFNTL_PROC_ID>20007001</PAFNTL_PROC_ID>
  <FP_FCTN_ID>20000001</FP_FCTN_ID>
  <PAFNTL_PROC_NR_ID>6.3.4</PAFNTL_PROC_NR_ID>
  <PAFNTL_PROC_NM>TRP GENERATION</PAFNTL_PROC_NM>
  <PAFNTL_PROC_DFN_TX>A eight-step process whereby the contents of plans
and messions
                                are analyzed wrt tactical reconnaissance needs and
the identified needs
                                matched to Army organic, as well as joint sensor
capabilities.
  </PAFNTL_PROC_DFN_TX>
</FPA_PROCESS>
```

5.7. Example PROC_ACTVTY_ASSOC

```
<PROC_ACTVTY_ASSOC>
  <PAR_PA_ID>20019316</PAR_PA_ID>
  <CHILD_PA_ID>20019315</CHILD_PA_ID>
  <PAA_ID>1</PAA_ID>
  <PAA_ROLE_CD>4</PAA_ROLE_CD>
</PROC_ACTVTY_ASSOC>
```

5.8. Example PROC_ACTVTY_TSK

```
<PROC_ACTVTY_TSK>
  <TSK_ID>1000003</TSK_ID>
  <PA_TSK_ID>1</PA_TSK_ID>
  <PA_ID>20019311</PA_ID>
  <ACTV_MDL_IA_ID>20000018</ACTV_MDL_IA_ID>
  <PATSK_ROLE_CD>2</PATSK_ROLE_CD>
</PROC_ACTVTY_TSK>
```

5.9. Example INFO_ELEM

```
<INFO_ELEM>
  <IE_ID>20000127</IE_ID>
  <IE_VERS_ID>1</IE_VERS_ID>
  <MSR_UNT_CD>EA</MSR_UNT_CD>
  <IE_NM>DoD Directives</IE_NM>
  <DEVEL_ORG_ID>23000077</DEVEL_ORG_ID>
  <IE_DEF_TX>Current DoD directives, as they pertain to tactical
reconnaissance.</IE_DEF_TX>
  <DOC_ID>323</DOC_ID>
  <IE_CREA_CALDT>20031214</IE_CREA_CALDT>
  <IE_REV_CALDT>20031214</IE_REV_CALDT>
  <IE_VALID_STA_CD>3</IE_VALID_STA_CD>
  <CSC_ID>20000001</CSC_ID>
  <SC_CD>14</SC_CD>
  <IE_ALT_ID>DODDIRS</IE_ALT_ID>
  <IE_SHRT_NM>DoD Dirs</IE_SHRT_NM>
</INFO_ELEM>
```

5.10. Example ACTV_MDL_IE_ROLE

```
<ACTV_MDL_IE_ROLE>
  <ACTV_MDL_IA_ID>20000012</ACTV_MDL_IA_ID>
  <AMIER_ID>100001</AMIER_ID>
  <IE_ID>20000131</IE_ID>
  <PA_ID>20019311</PA_ID>
  <AMIER_DESCR_TX>Intel Reports [OUTPUT] for External Source for model
Inputs</AMIER_DESCR_TX>
  <AMIER_TY_CD>2</AMIER_TY_CD>
  <AMIER_EXT_CD>1</AMIER_EXT_CD>
  <AMIER_MOD_CALDT>20031212</AMIER_MOD_CALDT>
</ACTV_MDL_IE_ROLE>
```

6. Example OV-5 AP233 XML Data

This section contains example OV-5 AP233 XML data.

6.1. Example Activity_method

```
<ap233:Activity_method id="id-actmet13178">
  <Name>Generate Tactical Reconnaissance Plan</Name>
  <Purpose>A set of plans and missions scheduled for execution</Purpose>
</ap233:Activity_method>

<ap233:Identification_assignment
id="id-actmet13178Identification_code-idassign">
  <Identifier>20019315</Identifier>
  <Role>Identification_code</Role>
  <Items>
    <ap233:Activity_method ref="id-actmet13178" xsi:nil="true" />
  </Items>
</ap233:Identification_assignment>

<ap233:Classification_assignment
id="id-actmet13178Identification_code-idassign-classification_assignment">
  <Items>
    <ap233:Identification_assignment
ref="id-actmet13178Identification_code-idassign" xsi:nil="true" />
  </Items>
  <Assigned_class>
    <ap233:External_class ref="id-Identification_code" xsi:nil="true" />
  </Assigned_class>
</ap233:Classification_assignment>

<ap233:Classification_assignment
id="id-actmet13178-classification_assignment">
  <Items>
    <ap233:Activity_method ref="id-actmet13178" xsi:nil="true" />
  </Items>
  <Assigned_class>
    <ap233:External_class ref="id-Typical_activity" xsi:nil="true" />
  </Assigned_class>
</ap233:Classification_assignment>
```

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```
</Assigned_class>  
</ap233:Classification_assignment>
```

6.2. Example Applied_activity_method_assignment

```
<ap233:Applied_activity_method_assignment id="id-appactmetassign19400">  
  <Assigned_activity_method>  
    <ap233:Activity_method ref="id-actmet13178" xsi:nil="true" />  
  </Assigned_activity_method>  
  <Items>  
    <ap233:Document_definition ref="id-docdef7298" xsi:nil="true" />  
  </Items>  
  <Role>Activity_output</Role>  
</ap233:Applied_activity_method_assignment>  
<ap233:Classification_assignment  
id="id-appactmetassign19400-classification_assignment">  
  <Items>  
    <ap233:Applied_activity_method_assignment ref="id-appactmetassign19400"  
xsi:nil="true" />  
  </Items>  
  <Assigned_class>  
    <ap233:External_class ref="id-Activity_output" xsi:nil="true" />  
  </Assigned_class>  
</ap233:Classification_assignment>
```

6.3. Example Activity_method_relationship

```
<ap233:Activity_method_relationship id="id-actmetrel149991111113229">  
  <Name>1</Name>  
  <Description>Subactivity</Description>  
  <Relating_method>  
    <ap233:Activity_method ref="id-actmet13178" xsi:nil="true" />  
  </Relating_method>  
  <Related_method>  
    <ap233:Activity_method ref="id-actmet13229" xsi:nil="true" />  
  </Related_method>  
</ap233:Activity_method_relationship>  
  
<ap233:Classification_assignment  
id="id-actmetrel149991111113229-classification_assignment">  
  <Items>  
    <ap233:Activity_method_relationship ref="id-actmetrel149991111113229"  
xsi:nil="true" />  
  </Items>  
  <Assigned_class>  
    <ap233:External_class ref="id-Activity_decomposition" xsi:nil="true" />  
  </Assigned_class>  
</ap233:Classification_assignment>
```